

Chapter 6. Keeping Foster Parents Supported and Trained: Empowering Foster and Kinship Parents as Agents of Change for Children and Youth in Foster Care

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Abstract

Numerous studies show that although children and youth placed in foster care often have histories of significant trauma along with behavioral and emotional challenges, they also respond positively to effective parenting strategies. The research literature also shows that a safe, predictable, and nurturing home environment, along with positive parenting, can help reverse the negative effects of trauma for children and youth. KEEP is a parenting program designed to support the unique needs of children and youth placed in foster care. The KEEP model focuses on optimizing the role of foster and kinship parents as the agents of positive change for children and youth. KEEP has been shown to increase participants' positive parenting skills, decrease parenting stress, decrease child and youth behavior problems, decrease the number of placement disruptions, and increase the number and pace of positive permanency outcomes. Findings from the KEEP randomized controlled trials have been replicated in multiple independent research trials in the United States, England, and Denmark.

Abbreviations: Facilitation Adherence Rating (FAR), Fidelity Observation System (FIDO), Parent Daily Report (PDR), Randomized Controlled Trial (RCT), Social Advocates for Youth (SAY), Treatment Foster Care Oregon (TFCO)

The Impact of Placement Disruption on Children and Youth in Child Welfare

Placement disruptions for children in foster care increase in frequency and likelihood the longer a child is placed in care. In the context of this chapter, foster care refers to foster and kinship placements for children and youth removed from their parents by the child welfare system. Placement disruptions include moves to new foster or kinship homes, group homes, psychiatric or residential treatment facilities, and juvenile justice facilities as well as the child/youth running away. Positive exits from foster care typically include returning to parents, adoption, or permanent placement in foster care. The *Child Welfare Outcomes 2010-2014: Report to Congress* includes outcome data from 48 states (US Department of Health and Human Services, 2017). This report shows a median rate of 85.6% of children placed for 12 months or less experience placement stability, defined as 0-2 placements (range = 73.7% - 91.4%). However, the placement stability rate drops to a median of 66.1% for children placed for 12-24 months (range = 44.0% - 76.9%) and to a median of 35.7% for children placed more than 24 months (range = 15.7% - 53.1%).

Time placed in foster care is only one factor contributing to placement disruptions. Research has indicated that a sizeable proportion of children in foster care exhibit externalizing and internalizing behavior problems (e.g., aggressive, disruptive, destructive, and oppositional behaviors and depression, anxiety, and symptoms of traumatic stress, respectively) (Landsverk, Garland, & Leslie, 2002). Data from the National Survey of Child and Adolescent Well-Being study revealed that a high proportion (43% based on teacher report, 50% based on parent report) of children in foster care evidence some form of serious externalizing behavior problem (Chapman et al., 2003). One factor that makes these findings highly concerning is that the evidence indicates that externalizing behavior problems are associated with placement disruptions for children and youth in foster care (Chamberlain, Price, et al., 2006; Farmer et al., 2005; James, 2004). Not only are externalizing behavior problems predictive of placement disruptions, but the experience of having repeated placement disruptions amplifies the child/adolescent's risks for later mental health and physical problems including drug abuse, participation in health-risking sexual behavior, suicide attempts, homelessness, and premature death (Newton et al., 2000; Ryan & Testa, 2005). Thus, children in foster care displaying high levels of emotional and behavior problems have an increased likelihood of experiencing a change in placement, which, in turn, further increases the risks of continued and escalating problems over their life course.

Trauma-related emotional problems such as depressed mood, anxiety, and posttraumatic stress disorder symptoms are estimated to affect up to 63% of maltreated children (Gabbay et al., 2004). These emotional difficulties and trauma symptoms are a highly relevant target of intervention for children in foster care who have suffered severe maltreatment and/or experienced multiple traumatic events. Indeed, removal from birth parents and subsequent placement changes likely add further trauma exposure. Well-documented negative long-term outcomes associated with untreated trauma include adult depression, substance use, health-

risking sexual behavior, comorbid psychiatric disorders, neurobiological deficits, and negative health effects (Anda et al., 2006; Kendall-Tackett, 2002).

Building on the evidence that the negative effects of trauma can be reversed (Dahl, 2004; Fisher et al., 2006), KEEP (Keeping Foster Parents Supported and Trained) is a trauma-informed parenting program that promotes creating a safe, predictable, and nurturing home environment through the use of positive parenting skills. KEEP was developed to address the behavioral and emotional challenges of children in foster care and to reduce the risk of the spiraling co-escalation of further traumatization, behavior problems, and placement disruptions. The body of literature on the KEEP program, described in detail below, highlights the myriad ways that children in KEEP-trained foster homes show improved emotional, behavioral, and placement-related outcomes compared to children in non-KEEP homes.

Foster Parent Pre-Service and In-Service Training

Requirements for and implementation of pre-service and in-service training for foster parents in the United States vary widely from state to state (Gerstenzang, 2009; Grimm, 2003). Although most states mandate a minimum of 30 hours of training before a child is placed in a foster home, prospective foster parents in some states are obligated to complete as few as four hours of training prior to placement, and a rare few have no pre-service training requirements (Grimm, 2003). The requirements for in-service training are also varied where some states require 20 hours of annual training, some require no in-service training, but most fall somewhere in between (Gerstenzang, 2009). Based on this review, trainings for foster parents are available and are often mandatory; however, it is less clear whether these trainings are effective in helping foster parents manage the common challenges presented by the child welfare population.

In fact, previous reviews have noted a scarcity of evaluations of the most commonly used forms of pre- and in-service foster parent training (Dorsey et al., 2008; Festinger & Baker, 2013). Increases in knowledge related to the training curriculum have been reported, but none have evaluated effects on child problem behaviors or placement change (Festinger & Baker, 2013). In a Cochrane review of in-service multisession cognitive-behavioral-based foster parent training programs, Turner, Macdonald, and Dennis (2007) concluded that there was inadequate evidence supporting the efficacy of such programs to provide any guidance for interventionists or practitioners. Murray and colleagues (2010) highlight that effective foster parent training requires establishing parenting confidence and the ability of the foster parents to apply their training to the daily responsibilities and jobs of parenting, which in turn helps to mediate the stress associated with parenting and create a balanced parenting style that provides both discipline and positive reinforcement. In addition, evidence has accumulated to support the effectiveness of group-based in-service trainings for foster parents that use standardized curricula to impact parent and child behaviors (Festinger & Baker, 2013).

Clearinghouses or other registries of evidence-based practices provide another vantage point from which to assess the effectiveness of current foster parent training programs and possible alternatives. For example, the California Evidence-Based Clearinghouse for Child Welfare (CEBC; <https://www.cebc4cw.org/>) is a database of programs for child welfare. The CEBC site allows users to search for and compare programs across a range of factors (e.g., target population, program goals, child welfare outcomes). The CEBC conducts thorough reviews of each program using a scientific rating scale with the following ratings: (1) well-supported by research evidence, (2) supported by research evidence, (3) promising research evidence, (4) evidence fails to demonstrate effect, (5) concerning practice, and (NR) not able to be rated on the CEBC scientific rating scale. The majority of pre-service and in-service trainings, including commonly used training programs, received a rating of NR, indicating that there is not sufficient research evidence to evaluate the program using the scientific rating scale. The two programs comprising the KEEP model, KEEP and KEEP SAFE (discussed below), received CEBC ratings of 3 and 2 respectively.

The KEEP Model: Keeping Foster Parents Supported and Trained

The KEEP model is an adaptation of the Treatment Foster Care Oregon model (TFCO; formerly Multidimensional Treatment Foster Care). Both KEEP and TFCO were developed by Dr. Patricia Chamberlain and have a theoretical base in social learning theory (Patterson & Reid, 1984).

TFCO

TFCO is a community-based model for treating youth with severe and chronic delinquency, emotional problems, and behavioral problems (Buchanan, et al., 2017). The model is based on social learning theory and was formerly branded as Multidimensional Treatment Foster Care (MTFC). Patti Chamberlain developed TFCO (Chamberlain, 2003) in 1983 in response to a State of Oregon request for proposals for community-based alternatives to incarceration and placement in residential/group care settings. TFCO originally was designed as an alternative to group home placement or commitment to state training facilities for severely delinquent boys, and it has since been adapted to treat girls with chronic delinquency because of severe emotional and mental health problems referred from juvenile justice, mental health, and child welfare systems (Chamberlain, Leve, & DeGarmo, 2007; Leve, Chamberlain, & Kim, 2015; Leve, Chamberlain, & Reid, 2005). The TFCO model is based on more than 45 years of longitudinal research on the development of antisocial behavior.

Social learning theory posits that challenging child and adolescent behavior can be characterized as a process of inadvertently reinforced negative behavior that grows in

severity and complexity over time. The coercive processes that sustain challenging behaviors are often reciprocal and transactional whereby parent–child interactions influence parenting practices, which are simultaneously influenced by environmental and contextual factors. For example, a child arguing with a parent over completing chores might elicit a helpless or frustrated response from a parent, which can contribute to the parent giving in and not asking the child to complete the chore in the future. Contextual influences such as parental stress might further reinforce this coercive family processes, and once coercive processes are in place, they tend to be maintained with very little reinforcement. Fortunately, coercive processes (regardless of severity or duration) can be interrupted by improving parenting practices, as parenting plays a central role in the development, maintenance, and treatment of antisocial behavior. According to social learning theory, new behaviors are most effectively taught and generalized in naturally occurring settings (e.g., family, school, peer group). The TFCO model, designed with this in mind, keeps youth in the community and uses the foster family setting to teach, practice, and reinforce adaptive youth responses to everyday compliance demands. Research on the TFCO model has helped to identify specific parenting practices that serve as key variables in the development and treatment of challenging behavior and delinquency.

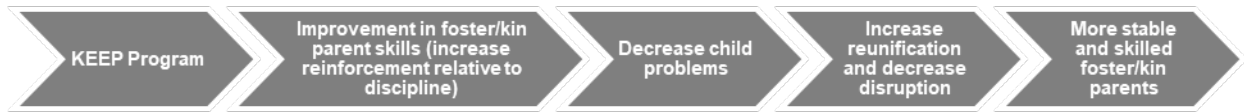
TFCO is a 6-9-month treatment program where children and youth are placed in highly trained and supported treatment foster homes. Children and youth placed in TFCO homes participate in a daily Point and Level system designed to reinforce typical positive and prosocial behaviors (e.g., getting up on time, going to school, being helpful). In addition, they receive individual therapy and skills coaching, and their biological parent or aftercare resource receives family therapy. TFCO foster parents attend a weekly support group to share stories, customize implementation of the Point and Level system, and review the child/youth's progress. For a full summary of the TFCO model and outcomes, see Buchanan et al. (2017).

KEEP

In the early 1990s, Dr. Chamberlain adapted the TFCO model to develop KEEP as a universal intervention to address the needs of all children in foster care. Similar to TFCO, the KEEP model is based on social learning theory and capitalizes on the powerful social role that parents play in the lives of their children and in the family as change agents. Where TFCO is an intensive 6-9-month treatment program, KEEP is a 16-week intervention. KEEP is currently being implemented in Oregon, San Diego, New York City, England, and Denmark. KEEP has previously been implemented in Maryland, Tennessee, and Washington state.

The KEEP model focuses on optimizing the role of foster and kinship parents as the agents of positive change for the child. In several studies (reviewed below), KEEP has been shown to increase participants' positive parenting skills, decrease parenting stress, decrease child and youth behavior problems, decrease the number of placement disruptions, and increase the number and pace of positive permanency outcomes. Figure 1 shows the Logic Model on the mechanisms of change for KEEP, highlighting the ways the program mitigates a child's risk for placement disruption.

Figure 1.
Logic Model on the Mechanisms of Change



KEEP Curriculum

The key principles of the model include: (a) reinforce normative and prosocial behavior in the child, (b) incentivize the behavior that parents want to see more of, (c) build cooperation, (d) teach new behaviors, (e) use non-harsh effective limit setting, and (f) manage emotions while parenting. These principles map onto protective and risk factors for vulnerable children and have been found to be malleable to change in previous studies (Eddy & Chamberlain, 2000). The KEEP model includes KEEP for children ages 4-12 and KEEP SAFE for youth ages 13-18. The KEEP and KEEP SAFE curricula include 16 weeks of manualized curricula, and each session is 90 minutes in length. The parenting skills included in the KEEP and KEEP SAFE curricula are consistent with those found in other evidence-based parenting programs for vulnerable children and youth (e.g., Parent Management Training Oregon [Forgatch & Patterson, 2010], Treatment Foster Care Oregon [Buchanan et al., 2017], Kids In Transition to School [Pears et al., 2018]). See Table 1 for information about the session topics. Delivering the intervention over 16 sessions provides foster/kin parents sufficient time to learn the KEEP parenting skills, practice them at home, and become comfortable and confident in consistently using them in their unique home environments.

Table 1.
KEEP and KEEP SAFE Curriculum Topics by Session

Session	KEEP	KEEP SAFE
1	Welcome and Overview	Welcome and Overview
2	Giving Clear Directions and Encouraging Cooperation	Giving Clear Directions and Encouraging Cooperation
3	Setting Clear Expectations and Teaching New Behaviors	House Rules and Pre-Teaching
4	Charts and Incentives with Children	Charts and Incentives with Teens – Part 1
5	Setting Limits	Charts and Incentives with Teens – Part 2
6	Discipline Strategies	Setting Limits
7	Balancing Encouragement and Limit Setting	Avoiding and Disengaging from Power Struggles

8	Avoiding and Disengaging from Power Struggles	Addressing Emotional Coercion
9	Pre-Teaching	Making a Plan for Super-Tough Behaviors
10	Making a Plan for Super-Tough Behaviors	Stress and Managing It
11	Promoting School Success	Promoting School Success
12	Promoting Positive Peer Relations	Promoting Positive Peer Relations
13	Stress and Managing It	Addressing Health Risking Sexual Behavior
14	Spare Session (review of prior content)	Addressing Teen Substance Use
15	Spare Session (review of prior content)	Technology and Teens
16	Celebration	Celebration

KEEP Intervention Delivery

KEEP groups are delivered by two co-group leaders over 16 weeks. Sessions are 90 minutes each week. The same group of 8-10 foster/kin parents attends each week, and most KEEP groups have a blend of both foster and kinship parents participating. In addition, most KEEP groups have a blend of both new and experienced parents. The KEEP model uses a group-based learning approach where parents are encouraged to share their experiences and ideas with other group members. Specifically, KEEP harnesses the knowledge and experience of the parents in the group to facilitate learning for all group members.

KEEP is delivered via a support group format rather than as a class where, rather than taking an expert role, KEEP group leaders facilitate discussions and problem solving about the weekly content and the parents' experiences with the KEEP skills. Each week, KEEP group leaders build on skills from the previous weeks, introduce new KEEP parenting skills, use discussion and role-play to tailor the content to the experiences of the parents in the group, and engage the parents in discussions about how the KEEP skills fit in their homes. Parents are encouraged to practice skills at home, and each session begins with a discussion about progress and challenges using the KEEP skills at home. Foster/kin parents identify a focal child at the start of the group, and weekly discussions and skills practice are tailored to the needs of that child. Often, the focus child has more challenging behaviors than other children in the home. Choosing one focus child also allows parents to learn and practice skills with one child at first, then generalize to other children as they experience success using new parenting skills. If a parent misses a group session, the group leaders will provide a make-up session.

KEEP group leaders collect and use data to inform the weekly sessions. KEEP group leaders collect the Parent Daily Report (PDR; Chamberlain & Reid, 1987) once per week for the focal child via a brief (5- to 10-minute) telephone call. PDR calls occur between KEEP sessions and are scheduled at a time convenient to the foster/kin parent. The PDR assesses the type and frequency of challenging behaviors demonstrated by the child over the past 24 hours. This measure includes 32 behaviors (e.g., arguing, backtalking, fighting) and the parent's associated

stress with each behavior. There is a child version and an adolescent version of the PDR. The PDR data are used to inform weekly KEEP session discussions and to monitor the child/teen's progress and parental stress over time. Children with 0-5 behaviors per day are at lower risk for placement disruption while those with more than 6 are at higher risk (Chamberlain, Price, et al., 2006). KEEP group leaders also track attendance and rate the foster/kin parent's engagement after each session. The engagement measure includes four items (e.g., "How much did they participate?" and "How much did they implement/complete the last session's home practice?") rated using a five-point Likert-type scale.

Foster/kin parents are referred to KEEP through official and informal sources including flyers posted at the child welfare office, recommendations from caseworkers, and word-of-mouth from parents who have completed KEEP groups. Participating parents are given monetary incentives for attending weekly sessions and bonuses for attending 80% of sessions. In addition, childcare and snacks are provided each week. Such incentives motivate parents to attend regularly. Monetary incentives have varied during real-world implementation of KEEP. For example, in Oregon, parents are paid \$25 per session for attendance and in New York City parents are paid \$25 per session for attendance, plus a \$100 bonus for completion of 80% of all sessions. In the Tennessee statewide implementation, parents who completed KEEP received an additional \$1.50 per day board rate. Monetary incentives are aimed at providing recognition for the time and effort parents make to attend sessions and help create a sense of respect and professionalization for their role as positive change agents.

KEEP Group Leader Training, Coaching, and Fidelity Monitoring

All KEEP group leaders are trained to identify, reinforce, and build upon the existing strengths of children/teens and their foster/kin parents in each group session. Prior to leading KEEP, group leaders attend a 5-day, interactive training with approximately 10 other trainees. The training includes discussion and role-play delivery of each KEEP session. During the training, trainees alternate between playing the role of the group leader and the role of a foster/kin parent. This training model gives new group leaders realistic experience of both leading and participating in a KEEP group.

Each group KEEP session is recorded, and the video is uploaded to a secure, web-based Fidelity Observation System (FIDO). For each new KEEP group leader, all sessions for their first three groups are watched and rated for fidelity by an experienced KEEP Coach, and the group leader receives weekly consultation from the KEEP Coach. Fidelity is rated using the Facilitation Adherence Rating (FAR) for KEEP, a 14-item measure rated on a five-point Likert-type scale. In addition to the session video and fidelity, FIDO is also used to track attendance, PDR, and written feedback to KEEP group leaders. KEEP Coaches are trained and supervised by model developers. Just as with KEEP group leaders, coaching sessions are observed and rated for model fidelity.

KEEP Outcomes

The KEEP model has been studied in multiple randomized controlled trials (RCTs) and implementation trials with over 2,000 foster/kin parents and their children. Each KEEP study is described in detail below, then a summary of the main findings is provided in Table 2. Across the KEEP trials, the focal child/youth completed study measures, though they did not participate in the KEEP intervention unless otherwise specified.

Oregon KEEP RCT

The initial KEEP study took place between 1988 and 1990 in three counties in Oregon. This study was designed to test the hypothesis that enhanced services and stipends to foster parents would benefit both foster parents and children in foster care. Seventy-two foster parents (61% female) and one of their children aged 4-7 were randomly assigned to one of three conditions: (a) Enhanced support and training (KEEP) plus an increased monthly payment ($n = 31$), (b) foster care as usual plus an increased monthly payment ($n = 14$), and (c) foster care as usual ($n = 27$). Foster care as usual included referrals to individual and family therapy, parenting classes for the biological parents, state mandated pre-service and in-service foster parent training, and case monitoring.

Ratings from child welfare caseworkers showed that foster parents in the KEEP condition increased their use of positive parenting skills after completing the KEEP group (Chamberlain et al., 1992). In addition, the PDR was collected when each family entered the study, and again 3 months later. The children placed in the KEEP-trained homes showed reduced behavior problems on the PDR compared to the children in both of the non-KEEP conditions (Chamberlain et al., 1992). Taken together, these results demonstrated the initial promise of the KEEP model.

San Diego KEEP RCT

To build on the promising results of the initial KEEP study, Dr. Chamberlain and colleagues conducted a large scale RCT of KEEP in San Diego, CA from 1999-2004. The San Diego KEEP RCT was designed to test the effectiveness of the KEEP model. Seven hundred foster/kin parents and one of the children aged 5-12 placed in their homes were randomly assigned to either the KEEP condition ($n = 359$) or the foster care as usual condition ($n = 341$). Foster care as usual included the same referrals and resources as this condition in the Oregon KEEP RCT. KEEP groups were delivered to groups of 3-10 foster/kin parents in community settings (e.g., at churches or community centers) in English and Spanish. Make-up sessions were delivered at home, and the PDR was collected once per week. During the PDR call, parents

were asked standardized questions rated on a seven-point Likert-type scale about their use of the KEEP parenting skills that day (e.g., “How often did you use rewards?” and “How often did you use discipline?”).

Results from the San Diego KEEP RCT established the initial effectiveness of KEEP to increase foster/kin parents’ use of positive parenting practices, reduce challenging child behaviors, increase children’s chance of exiting foster care, and reduce placement disruptions. After 5 months, parents in the KEEP condition reported that they used more positive parenting skills than at baseline compared to the parents in the foster care as usual condition, and in particular, the KEEP parents used a higher proportion of positive reinforcement (Chamberlain, Price, Leve, et al., 2008). Further analyses showed that the proportion of positive reinforcement mediated reduced child behavior problems and that KEEP-trained parents who rated their child as having 6 or more behaviors on the PDR at baseline (and thus a higher risk of placement disruption) demonstrated greater increases in their use of positive reinforcement over the course of the study (Chamberlain, Price, Leve, et al., 2008). PDR results also showed that children of parents in the KEEP condition had lower rates of behavior problems than children in non-KEEP-trained homes (Chamberlain, Price, Leve, et al., 2008). Using child welfare administrative records data, Chamberlain and colleagues also demonstrated that placement in a KEEP-trained home not only nearly doubled the chances of a child exiting from foster care (e.g., reunifying with their parent, adoption), but also mitigated the risk-enhancing effects of multiple placements for children in foster care (Price et al., 2008). Simply put, children in KEEP-trained homes were less likely to disrupt from their foster/kin placement than children in the foster care as usual condition. As described above, children in foster care with higher rates of challenging behavior and children with multiple placement disruptions are at increased risk for future placement disruptions compared to their peers with lower rates of challenging behavior and fewer placement changes. The study authors suggest that, “One of the processes that may be contributing to this relation is the bidirectional relation between placement instability and child behavior problems” whereby reductions in challenging child behavior are related to increased foster parent competence and confidence that they have the skills to maintain the child in their home (Price et al., 2008; p. 8).

An additional within treatment analysis of the foster/kin parents who participated in the KEEP groups showed that the engagement of the parent in the weekly KEEP sessions impacts outcomes for children. As described in the KEEP Intervention Delivery section above, KEEP group leaders rate the foster/kin parent’s engagement after each session on a four-item measure rated using a five-point Likert-type scale. Findings from hierarchical linear model and multilevel logit model analyses show that parental engagement moderated the influence of prior placements, particularly for Latino foster/kin parents (DeGarmo et al., 2009). The average number of children’s prior placements was consistent across race-ethnicity groups. In addition, parental engagement was found to moderate risk of negative placement disruption for all race-ethnicity groups (DeGarmo et al., 2009). These results confirmed the researchers’ hypothesis that parents with higher levels of group engagement would derive greater benefit from KEEP and identified parents’ positive group engagement as a key mechanism of change for children with greater risk of disruption.

The data from the San Diego KEEP RCT also provided an opportunity to examine other factors related to placement disruption for children in both the KEEP and foster care as usual conditions. Examining outcomes for the children in the foster care as usual condition ($n = 246$), Chamberlain and colleagues found that children placed in non-kinship homes were more likely to disrupt from their placement than children placed with relatives (Chamberlain, Price, et al., 2006). Specifically, the children placed in non-kin homes (64%) were nearly three times more likely to disrupt from their placement than children placed in kinship homes. A later analysis of the KEEP sample replicated the finding that children placed in non-kinship homes were more likely to experience placement disruption than children placed with relatives (Hurlburt et al., 2010). Taken together, these findings are consistent with prior work showing that children placed with relatives are less likely to disrupt from placement (James, 2004). Other factors such as child gender, child and foster/kin parent race-ethnicity, child age, and number of children in the home were not linearly related to placement disruptions for this sample of children. Using a Cox hazard regression model, the researchers also found that the mean number of behaviors on the PDR at baseline predicted a child's risk for placement disruption such that the risk of disruption increased by 25% for each additional behavior over 6 (Chamberlain, Price, et al., 2006). The San Diego KEEP RCT was a major step forward in understanding the complex dynamics that contribute to and protect against placement disruption.

Train-the-Trainers

In an effort to enhance the post-study sustainability of KEEP at the request of the San Diego Health and Human Services Agency, the San Diego KEEP RCT utilized a cascading implementation model to test two versions of KEEP group delivery. The first cohort of KEEP group leaders (generation 1) were trained and supervised by KEEP model developers. The second cohort of KEEP group leaders (generation 2) were trained and coached by experienced group leaders (called local coaches) from generation 1. Model developers trained and supervised local coaches to train/coach the generation 2 KEEP group leaders, but had no direct contact with the group leaders themselves. See KEEP Group Leader Training section, above, for training details. Participants in the KEEP condition show no differences in child behavior and foster/kin parent outcomes for KEEP groups led by generation 1 and 2 KEEP group leaders (Chamberlain, Price, Reid, and Landsverk, 2008). Specifically, children placed in KEEP-trained homes had similar reductions in rates of challenging behavior whether the KEEP groups were delivered by generation 1 or generation 2 group leaders. This finding provided the initial evidence that KEEP can be effectively delivered in community settings without direct model developer involvement—a finding that indicated promise for ongoing implementation of KEEP in San Diego following study completion. A later study examined fidelity data for KEEP group leaders delivering KEEP in community-based, non-research settings (e.g., sites that implemented KEEP in their local area and were not affiliated with a formal study). Findings from the community-based implementations of KEEP showed that fidelity ratings of generation 2 KEEP group leaders were equivalent to ratings for generation 1 KEEP group leaders (Buchanan et al., 2013). Fidelity

was rated using the FAR, a 14-item measure rated on a five-point Likert-type scale, described above. These findings demonstrate that KEEP can be delivered with fidelity in community settings without direct involvement from model developers.

The KEEP SAFE Model

Following the successful outcomes demonstrated through the San Diego KEEP RCT, Chamberlain and colleagues developed and tested a version of the KEEP model for foster/kin parents of adolescents: KEEP SAFE. KEEP SAFE was based on the same positive parenting practices and key principles as the KEEP model with additional content tailored to the developmental needs of older youth in foster care. Multiple studies have demonstrated that youth placed in foster care are at higher risk for a range of health-risking behaviors than their peers without histories of foster care involvement (Aarons et al., 2008; Keller et al., 2010; Thompson & Auslander, 2007). Substance use has been identified as one of the most common mental health challenges experienced by youth in foster care, with rates of drug and alcohol abuse at two to five times higher than for their non-foster care involved peers (Keller et al., 2010). Other studies have shown that substance use is an important treatment target because substance use and abuse has been found to be a precursor to poor academic achievement, health-risking sexual behavior, and pregnancy during the teen years (Kim et al., 2013). In addition, an in-depth analysis of risk factors for adolescent girls involved with the juvenile justice system showed that they had poor knowledge of methods to reduce risk of pregnancy and prevent sexually transmitted infections, high rates of substance use, and high rates of association with peers who were engaging in illegal or antisocial behavior (Chamberlain, Leve, & Smith, 2006). For these reasons, KEEP SAFE sessions incorporate the same core parenting skills found in KEEP and also include parenting skills related to substance use, health-risking sexual behavior, and adolescent peer relations (see Table 1).

Like standard KEEP, KEEP SAFE foster/kin parent groups are delivered by two co-group leaders for 16 weeks, and the adolescent version of the PDR is collected weekly. In addition to the foster/kin parent group, the original KEEP SAFE model incorporated a 1:1 youth skills component to coach and practice skills that mapped onto the foster/kin parent sessions. Youth skills coaching sessions focused on skills to help adolescents to set goals, regulate emotions, make and maintain friendships with prosocial peers, reduce substance use, and reduce health-risking sexual behavior. Two KEEP SAFE RCTs were conducted between 2006 and 2009. The first RCT focused on girls in early adolescence, and the second RCT included both boys and girls in early through late adolescence. Both are described in detail in the next sections.

KEEP SAFE Outcomes

Oregon KEEP SAFE RCT

The Oregon KEEP SAFE RCT was conducted in two counties in Oregon 2006-2011. This RCT was designed to test the efficacy of the KEEP SAFE model with middle school-age girls placed in foster/kin care. This study was also called the Middle School Success project, and a primary goal was to test the KEEP SAFE model as a preventive intervention for younger adolescent girls (Chamberlain, Leve, & Smith, 2006). The transition from elementary to middle school is a particularly vulnerable developmental period for girls in foster care. Prior studies of girls who participated in the TFCO model have shown that girls who were placed in out-of-home care as children and later entered the juvenile justice system typically did so at younger ages (Leve & Chamberlain, 2004). Specifically, the researchers found that for the girls who participated in TFCO who also had histories of child welfare involvement (e.g., founded allegations of abuse and neglect, placement in foster/kin care), the age of first arrest was 12.5 years old (2004). Such findings point to early adolescence as a developmental target for preventive intervention, and development of the KEEP SAFE model was informed by the knowledge gained from the earlier TFCO trials with adolescent girls (2004). Eligible participants for the Oregon KEEP SAFE RCT were girls finishing elementary school (typically the fifth grade) and about to start middle school and placed in foster/kinship care. One hundred girls and their foster parents were randomly assigned to either the KEEP SAFE condition ($n = 48$) or the foster care as usual condition ($n = 52$).

KEEP SAFE parent groups were delivered in a conference room at the Oregon Social Learning Center and in the community (e.g., churches or community centers). Make-up sessions were delivered at home, at the center, or in the community. The adolescent version of the PDR was collected once per week. In addition to the parent groups, youth participants attended a 6-week summer program prior to the start of middle school, followed by weekly 1:1 youth skills coaching sessions during their first year of middle school (typically the sixth grade).

Published findings for the Oregon KEEP SAFE RCT focus on youth outcomes, and data were collected at baseline then 6, 12, 24, and 36 months post-baseline with 90-98% participation in assessments across data collection timepoints. One-year outcomes showed improved prosocial behavior for youth and reduced placement disruptions for youth who participated in KEEP SAFE (Kim & Leve, 2011). As with the KEEP San Diego RCT, child welfare administrative records data were used to evaluate placement disruptions. Three-year outcomes include reduced substance use (particularly tobacco and marijuana use), reduced internalizing and externalizing behaviors, reduced delinquency (Kim & Leve, 2011), and reduced health-risking sexual behavior (Kim et al., 2013). Further analyses revealed that not all outcomes were direct effects of the KEEP SAFE intervention and instead were a result of the youth's changed behavior over time following the completion of the KEEP SAFE intervention. For example, improvements in internalizing and externalizing behaviors and reductions in delinquency (measured at 12 and 24 months) for youth in the KEEP SAFE condition were mediated by youths' earlier improvements in prosocial behavior (measured at 6 and 12 months; Kim & Leve,

2011). In addition, at 3 years postbaseline, lower levels of health-risking sexual behaviors were mediated by youths' reduced tobacco and marijuana use (Kim et al., 2013).

San Diego KEEP SAFE RCT

The San Diego KEEP SAFE RCT took place from 2006-2009. This RCT was designed to test the efficacy of the KEEP SAFE model with both boys and girls aged 11-17 placed in foster/kin care. Two hundred and fifty-nine youth, girls ($n = 154$) and boys ($n = 105$), placed in care were randomly assigned to either the KEEP SAFE condition ($n = 117$) or the foster care as usual condition ($n = 142$).

Similar to the RCT of KEEP conducted in San Diego, KEEP SAFE groups were delivered to groups of 3-10 foster/kin parents in the community in English and Spanish. Make-up sessions were delivered at home or by telephone. The adolescent version of the PDR was collected once per week. This study replicated key findings from the Oregon KEEP SAFE RCT. Specifically, youth in the KEEP SAFE condition showed reduced substance use (tobacco, alcohol, and marijuana) at 18 months after the start of the intervention (Kim et al., 2017). Further analyses showed that the reduced substance use findings were a result of a cascade of changes over time: (a) the foster/kin parent-youth relationship quality improved within 6 months, (b) youth were less likely to associate with delinquent peers at 12 months, and (c) as a result, youth were less likely to use illegal substances at 18 months (Kim et al., 2017). Similar to the Oregon KEEP SAFE RCT, this trial demonstrated that longer-term effects of the KEEP SAFE intervention are mediated by shorter-term changes in behavior (e.g., reductions in associations with delinquent peers was preceded by improvement in the youth-foster/kin parent relationship). Further, these findings were generalized to a developmentally and ethnically diverse sample of youth in both middle and high school, suggesting that KEEP SAFE is effective for both younger and older youth with diverse ethnic backgrounds. Findings related to placement stability have not yet been published for this sample.

Unpublished findings did not bear out evidence for the value of the youth skills coaching component over and above the impact of the parenting intervention. Specifically, no meaningful differences on key outcomes were found for youth who participated in the skills coaching sessions compared to those who did not. Therefore, the skills component has been removed from the current KEEP SAFE model. In addition, while the original KEEP SAFE model was delivered over 20 weeks to accommodate the additional youth-specific content, current implementations of KEEP SAFE are delivered over 16 weeks using a revised and modernized manual.

KEEP and KEEP SAFE Replication Trials

The KEEP and KEEP SAFE program results have been replicated in five independent trials: two in San Diego, CA, one in Maryland, one in England, and one in Denmark. These trials

were initiated by researchers in each of these sites without direct involvement of the KEEP developers.

SAY KEEP Replication and Effectiveness Trials

Following the completion of the San Diego KEEP RCT in 2004, Price and colleagues conducted a KEEP replication trial in 2005-2008 with Social Advocates for Youth (SAY), a non-profit agency in San Diego that delivers a range of social and treatment programs in San Diego County. The SAY KEEP Replication was a quasi-experimental effectiveness study where a sample of 181 foster/kin parents and one focus child aged 5-12 placed in their home were recruited to the KEEP condition, and data from the foster care as usual condition from the 1999-2004 San Diego KEEP RCT ($n = 341$) was used as the control condition. For the SAY KEEP Replication, KEEP groups were delivered in San Diego County by SAY staff who were trained and supervised by experienced generation 2 group leaders from the San Diego KEEP RCT. KEEP group delivery was consistent with prior KEEP studies. Results from the SAY KEEP Replication reproduced the findings from the San Diego KEEP RCT showing that children placed in KEEP-trained homes show reduced child behavior problems at 4 months postbaseline, regardless of the initial level of behavior problems, even when KEEP is delivered by staff from a community agency and not study staff (Price et al., 2012). Placement outcomes were not examined for this sample.

To further test the impact of KEEP delivery in community settings, Price and colleagues conducted a second KEEP replication trial in 2009-2013 in San Diego, CA. The second replication trial was an RCT (SAY KEEP Sibling RCT), and outcomes were examined not only for a focal child, as in the prior KEEP and KEEP SAFE RCTs, but also for a specific foster sibling placed in the same home as the focal child. KEEP groups for the SAY KEEP Sibling RCT were delivered in San Diego County by SAY staff, some of whom had participated in the SAY KEEP Replication study. Three hundred and fifty-five children aged 5-12, their foster/kin parents, and a foster sibling were randomly assigned to the KEEP condition ($n = 164$) or the foster care as usual condition ($n = 171$). KEEP group delivery was consistent with prior KEEP studies.

Price and colleagues again replicated the finding that children placed in KEEP-trained homes demonstrated fewer behavior problems than children in the foster care as usual condition at 5 months post-baseline (Price et al., 2015). In addition, results show that both the child who is the focus of discussions in the KEEP groups and another foster sibling placed in the same home show reduced behavior problems at the end of the intervention (Price et al., 2015). Results also show that foster and kinship parents who participated in the KEEP groups reported lower levels of stress associated with the focal child's problem behavior after completing KEEP (Price et al., 2015). By demonstrating the same outcomes for both the focal child and a foster sibling, this study highlights the value of the KEEP intervention to positively impact multiple youth placed in the same foster/kin home.

Maryland KEEP Replication

The Maryland KEEP Replication took place in 2010-2012. Sixty-five children aged 4-12 and their foster/kin parents participated in Maryland KEEP. The Maryland KEEP Replication study was a treatment-only trial with pre- and post-test data collection and analyses. As with other KEEP trials, child participants completed study measures, though they did not participate in the intervention. KEEP groups were delivered by generation 1 group leaders, and other KEEP group delivery details were consistent with prior KEEP studies (e.g., size, make-up sessions, PDR).

The children in the Maryland KEEP Replication showed more frequent and significant behavior problems at the start of the intervention as measured by the PDR than did children in the prior KEEP trials. Yet, consistent with other KEEP studies, the Maryland KEEP Replication results show both reduced frequency of challenging child behavior and reduced severity of behavior problems 6 months after starting the KEEP group (Greeno et al., 2016). Notably, the Maryland KEEP Replication reproduced the San Diego KEEP RCT finding that children in KEEP-trained homes were less likely to disrupt from their foster/kin placements. Examinations of child welfare administrative records for the children placed in non-relative foster care ($n = 57$ or 88% of the sample) show that, compared to their placement data in the period prior to the start of KEEP, the children had more stable placements with reduced placement disruptions in the year after KEEP (Greeno et al., 2016). Before KEEP, 72% of the children placed in non-relative foster care had stable placements (defined as two or fewer placements) and 91% had stable placements in the year after KEEP (2016). In addition, 39% of the children placed in non-relative foster care exited from care (e.g., reunified with parents, adoption) within 12 months of the completion of the KEEP group. Records were not available for the children placed in kinship care (22% of the sample). Although there was no comparison group, the Maryland KEEP Replication findings related to reduced challenging child behavior, improved placement stability, and exits from care lend further confidence to the effectiveness of the KEEP intervention.

England KEEP & KEEP SAFE Replication

The KEEP programme in England began in 2009 as a government-funded pilot of KEEP in five sites (England KEEP & KEEP SAFE Replication). The goals of the pilot were to reduce placement disruption and provide foster/kin carers with training and support. The England KEEP & KEEP SAFE Replication took place from 2009-2014. Five hundred and seventy-two foster/kin carers of children aged 5-12 and youth aged 10-17 participated. The England KEEP Replication study was a treatment-only trial with pre- and post-test data collection and analyses. KEEP group delivery details were consistent with prior KEEP studies (e.g., size, make-up sessions, PDR), and the England KEEP Replication utilized the cascading implementation model tested in the San Diego KEEP RCT (described above) where generation 1 group leaders later train and support generation 2 group leaders.

Results from the England KEEP and KEEP SAFE implementation replicated earlier findings including reduced challenging child behavior for children and youth, reduced parenting stress, and increased use of positive parenting practices at the end of the intervention (Roberts et al., 2016). Longer-term outcomes show that child/youth and carer improvements were maintained at 6 and 12 months after completion of the groups (Roberts et al., 2016). Data collection for all measures occurred at baseline, at the end of the KEEP group (approximately 4 months postbaseline), and again at 6 and 12 months after the final KEEP group session. Challenging child behavior was measured using the PDR and the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). The SDQ is a widely used, 25-item measure of child behavior. For the children in KEEP and KEEP SAFE-trained homes, mean scores on both the PDR and the SDQ were lower for the three follow-up time points than at baseline, showing reduced challenging behavior for the children and youth. Parenting stress was measured using the PDR, and carers reported that fewer of the child/youth's behaviors were stressful to them at the three follow up time points. The Parenting Scale (Arnold, et al., 1993) is a 30-item self-report measure of parenting discipline styles related to challenging child behavior (e.g., overly long reprimands or reliance on talking). Carers reported lower scores on the Parenting Scale at the end of the KEEP and KEEP SAFE groups, with scores continuing to decline at the two follow-up time points, indicating reductions in ineffective or harsh parenting practices and increased use of positive parenting practices over time. In addition, results for foster and kinship carers were found to be equivalent across all measures, suggesting that KEEP and KEEP SAFE are effective for both groups of carers. KEEP continues to be implemented in England in one site.

Denmark KEEP Replication

The Denmark KEEP Replication took place in 2015-2017 across seven sites. The Denmark KEEP Replication was a pilot funded by the Danish government following a call to improve training and support for foster/kin carers. Sixty-four foster/kin carers of children aged 5-12 participated. KEEP group delivery details were consistent with prior KEEP studies (e.g., size, make-up sessions, PDR), and the Denmark KEEP Replication utilized the cascading implementation model tested in the San Diego KEEP RCT (described above).

The Denmark KEEP Replication used a non-randomized control group design with $n = 43$ in the KEEP condition and $n = 21$ in the foster care as usual control condition. The PDR and SDQ were used to measure challenging child behavior. Data collection for the PDR and SDQ occurred at baseline and at the end of the KEEP group (approximately 4 months postbaseline). Results show somewhat reduced PDR and SDQ scores from baseline to the end of the KEEP group, indicating reduced challenging child behavior at the end of the intervention (Oxford Research, 2017). The study authors note that the reductions on the PDR and SDQ were not statistically significant. In addition, the Denmark KEEP Replication included qualitative interviews with the carers who participated in the KEEP groups. Qualitative outcomes indicate that foster/kin carers experienced less stress related to their child's challenging behaviors after

the completion of the KEEP group, that they used the positive parenting skills from KEEP regularly, and that they felt more skilled to handle child behavior problems (2017). Carers also reported that the children in their homes seemed happier and calmer (2017). KEEP continues to be implemented in Denmark in four sites. In addition, in 2018, experienced KEEP group leaders contributed to a cultural adaptation of the KEEP SAFE curriculum for the Danish context. Results from the KEEP SAFE pilot are pending.

Table 2.
Main Findings From Research on the KEEP Model

KEEP		
Study	Publication	Main Findings
Oregon KEEP RCT Years: 1988-1990 <i>N</i> = 72 children aged 4-7 and their foster/kin parents	Chamberlain et al. (1992)	Compared to the foster care as usual and the foster care as usual plus increased payment conditions, for parents and children in the KEEP condition, at 3 months postbaseline, results included: <ul style="list-style-type: none"> • Increased use of positive parenting skills • Reduced challenging child behavior
San Diego KEEP RCT (Efficacy Trial) Years: 1999-2004 <i>N</i> = 700 children aged 5-12 and their foster/kin parents	Chamberlain, Price, Leve, et al. (2008)	Compared to the foster care as usual condition, for parents and children in the KEEP condition, at 5 months postbaseline, results included: <ul style="list-style-type: none"> • Increased use of positive parenting skills by foster/kin parents, including positive reinforcement • Reduced challenging child behavior Mediation analysis results included: <ul style="list-style-type: none"> • Proportion of positive reinforcement mediates effects on child behavior problems • Positive reinforcement mediation effect is particularly evident for children with high levels of behavior problems at baseline
	Price et al. (2008)	Compared to the foster care as usual condition, for children in the KEEP condition, at 5 months postbaseline, results included:

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		<ul style="list-style-type: none"> • Increased chance of positive exit from foster care (nearly double) • KEEP mitigated the negative risk-enhancing effect of multiple prior placements
	Chamberlain, Price, et al. (2006)	<p>For children in the foster care as usual condition, at 12 months postbaseline, results included:</p> <ul style="list-style-type: none"> • Children in non-kin placements were more likely to disrupt from placement than children placed with relatives • The mean number of behaviors on the PDR at baseline predicts risk for placement disruption
	Hurlburt et al. (2010)	<p>For children in the foster care as usual condition, at 12 months postbaseline, results included:</p> <ul style="list-style-type: none"> • Children in non-kin placements were more likely to disrupt from placement than children placed with relatives • The mean number of behaviors on the PDR at baseline predicts risk for placement disruption
	Chamberlain, Price, Reid, and Landsverk (2008)	<p>For children in the KEEP condition, at 12 months postbaseline, results included:</p> <ul style="list-style-type: none"> • Reduced challenging child behavior was the same for children in foster/kin homes whether KEEP group leaders were trained and supervised by study staff (cohort 1) or by intervention staff (cohort 2)
	DeGarmo et al. (2009)	<p>For foster/kin parents in the KEEP condition, at 12 months postbaseline, results included:</p> <ul style="list-style-type: none"> • Foster/kin parent engagement in KEEP moderates the influence of prior placements and risk of negative placement disruption for children placed in Latino foster/kin homes
	Chamberlain, Price, Reid, and Landsverk (2008)	<p>KEEP Cascade analysis results included:</p> <ul style="list-style-type: none"> • No differences in child behavior and foster/kin parent outcomes for KEEP groups led by generation 1 and generation 2 KEEP group leaders

KEEP in Community-Based, Non-Study Settings	Buchanan et al. (2013)	Fidelity analysis results included: <ul style="list-style-type: none"> • Equivalent fidelity for KEEP groups led by generation 1 and generation 2 KEEP group leaders
KEEP SAFE		
Study	Publication	Main Findings
Oregon KEEP SAFE RCT Years: 2006-2011 N = 100 girls (5 th grade) and their foster/kin parents	Kim & Leve (2011)	Compared to the foster care as usual condition, for youth in the KEEP condition, at 12 months postbaseline, results included: <ul style="list-style-type: none"> • Reduced placement disruptions • Improved prosocial behavior At 36 months postbaseline, results included: <ul style="list-style-type: none"> • Reduced substance use, particularly tobacco and marijuana use • Reduced internalizing and externalizing behaviors and reduced delinquency were mediated by improved prosocial behavior
	Kim et al. (2013)	Compared to youth in the foster care as usual condition, for youth in the KEEP SAFE condition, at 36 months postbaseline, results included: <ul style="list-style-type: none"> • Lower levels of health-risking sexual behaviors were mediated by reduced tobacco and marijuana use
San Diego KEEP SAFE RCT Years: 2006-2009 N = 259 youth aged 11-17 and their foster/kin parents	Kim et al. (2017)	Compared to youth in the foster care as usual condition, for youth in the KEEP condition, at 6 months postbaseline, results included: <ul style="list-style-type: none"> • Improved quality of relationship with foster/kin parents At 12 months postbaseline, results included: <ul style="list-style-type: none"> • Fewer associations with delinquent peers At 18 months postbaseline, results included: <ul style="list-style-type: none"> • Reduced substance use
KEEP and KEEP SAFE Effectiveness and Replication		
Study	Publication	Main Findings
SAY KEEP Replication	Price et al. (2012)	Compared to a historical foster care as usual control condition from the San Diego KEEP RCT,

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<p>Years: 2005-2008 <i>N</i> = 181 children aged 5-12 and their foster and kinship parents</p>		<p>for children in the KEEP condition, at 4 months postbaseline, results included:</p> <ul style="list-style-type: none"> • Reduced challenging child behavior
<p>SAY KEEP Sibling RCT Years: 2006-2009 <i>N</i> = 335 children aged 5-12 and their foster/kin parents</p>	<p>Price et al. (2015)</p>	<p>Compared to parents and children in the foster care as usual condition, for parents and children in the KEEP condition, at 5 months postbaseline, results included:</p> <ul style="list-style-type: none"> • Reduced parental stress associated with child behavior problems • Reduced challenging child behavior for the focal child • Reduced challenging child behavior for foster siblings
<p>Maryland KEEP Replication Years: 2010-2012 <i>N</i> = 65 children aged 4-12 and their foster/kin parents</p>	<p>Greeno et al. (2016)</p>	<p>All participants received KEEP, and at 6 months postbaseline, results included:</p> <ul style="list-style-type: none"> • Reduced challenging child behavior • Reduced placement disruptions
<p>England KEEP Replication Years: 2009-2014 <i>N</i> = 572 children and youth aged 4-17 and their foster/kin parents</p>	<p>Roberts et al. (2016)</p>	<p>All participants received KEEP or KEEP SAFE, and at 6 and 12 months postbaseline, results included:</p> <ul style="list-style-type: none"> • Reduced challenging child/youth behavior • Reduced foster/kin carer stress • Increased use of positive parenting skills and decreased use of ineffective or harsh parenting skills
<p>Denmark KEEP Replication (mixed-method study) Years: 2015-2017 <i>N</i> = 64 children aged 5-12 and their foster/kin parents</p>	<p>Oxford Research (2017)</p>	<p>Compared to the foster care as usual condition, for youth in the KEEP condition, at 6 months postbaseline, qualitative results included:</p> <ul style="list-style-type: none"> • Reduced challenging child behavior (not statistically significant) <p>At 6 months postbaseline, qualitative results for carers and children in the KEEP condition included:</p> <ul style="list-style-type: none"> • Increased use of positive parenting skills • Reduced parental stress associated with challenging child behavior • Parents feel more skilled to handle challenging

		<p>child behavior</p> <ul style="list-style-type: none"> • Foster/kin parent report that children are happier and calmer
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Conclusion

The KEEP and KEEP SAFE models were developed specifically to address the behavioral and emotional needs of children and youth placed in foster and kinship care. The link between multiple placement disruptions and increased risk for cascading mental health, physical health, and social problems for children and youth in foster care is well documented (Newton et al., 2000; Ryan & Testa, 2005). Similarly, the link between higher levels of emotional and behavioral problems and increased rates of placement disruptions for children and youth in foster care is also well established (Chamberlain, Price, et al., 2006; Farmer et al., 2005; James, 2004). Therefore, children and youth’s emotional and behavioral health is a logical target for intervention.

Group-based in-service trainings for foster/kin parents using standardized curricula have been established as an effective training strategy (Festinger & Baker, 2013). The KEEP model is standardized, group-based, and delivered as a support group to increase foster/kin parent learning and engagement with the group and session content. As a result, foster/kin parents who participate in KEEP groups are empowered to use a range of positive parenting skills tailored to the context of their child and their home. Thus, supporting foster/kin parents to create and maintain stable, predictable, and nurturing homes places them as the agents of change for children and youth in care.

Multiple studies of the KEEP model have demonstrated that use of positive parenting skills, particularly positive reinforcement, was related to reduced stress for foster/kin parents, improved parenting confidence, and improved child/youth behavior (e.g., reduced internalizing and externalizing behavior problems, reduced substance use, reduced health-risking sexual behavior). Further, KEEP has the potential to ameliorate the risks associated with histories of trauma and placement disruption by reducing health-risking behaviors and placement disruptions for children and youth in foster care.

Successful implementation of evidence-based models like KEEP with diverse communities in non-study environments is essential to achieving wider service delivery and, ultimately, improving outcomes for children and youth in foster care. The KEEP literature includes multiple examples of successful delivery of KEEP in community-based settings with diverse ethnicities, cultures, and languages. Currently, the KEEP model is implemented in San Diego and New York City, statewide in Oregon, and in multiple sites in England and Denmark.

Future Directions for the KEEP Model

KEEP's cascading implementation model provides a framework for integrating KEEP training and support into the workforce of implementation sites. For example, community-based implementations of KEEP in New York City, Oregon, Tennessee, England, and Denmark successfully developed a strong cohort of generation 2 group leaders who were trained and supported by local KEEP coaches who had previously been generation 1 group leaders. Other efforts to increase the reach of KEEP include delivering the model via tele-health methods; adapting the model to address specific cultural and social needs of children, youth, and foster/kin parents; and evaluating the unique needs of kinship families.

In Oregon, a virtual version of the model, "TeleKEEP," is being piloted with the aim of increasing the reach of KEEP to rural foster/kin families. For TeleKEEP, foster/kin parents attend KEEP and KEEP SAFE sessions from home via video conference. Early unpublished results from the Oregon TeleKEEP pilot show high rates of foster/kin parent attendance and engagement and decreases in challenging child and youth behavior (as measured by the PDR). The TeleKEEP pilot began in the fall of 2019 and, due to the COVID-19 pandemic, the early lessons learned helped the model developers support all KEEP sites nationally and internationally to move to an online platform in April 2020.

The KEEP model developers are partnering with a community agency with strong connections to the Native American community in Oregon to adapt the KEEP model for the specific cultural and social needs of Native American children and youth in foster care. Nationwide, Native American communities have a complicated and often tense relationship with child welfare (Cooper, 2013). In Oregon, many Native American children and youth are placed in non-Native foster homes and, as such, may not have access to culturally important events, rituals, and items. Though still in the early stages, this adaptation of the KEEP model has the potential to provide Native and non-Native foster/kin families with the skills to implement positive parenting practices in a culturally sensitive and responsive manner.

The KEEP model developers are also piloting a version of KEEP and KEEP SAFE specific to the needs of kinship families. The published results of multiple RCTs (described above) as well as recent unpublished analyses of data from community-based implementations of KEEP have demonstrated that children in both foster and kinship homes benefit from placement in KEEP-trained homes. However, empirical questions remain about potential additional benefits that could be derived from a kinship-specific version of the KEEP model.

The urgent need for high-quality, culturally sensitive, and effective parenting to prevent placement disruptions and ameliorate trauma-related behavioral and emotional challenges for children and youth placed in foster care cannot be overstated. Multiple research trials demonstrate the effectiveness of the KEEP parenting strategies to produce significant and meaningful outcomes for children and youth, for their foster/kin parents, and, as a result, for the child welfare system.

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