



PCIT: Conceptualizing a Continuum of Prevention

Irene Brodd, Ciera E. Schoonover,
and Larissa N. Niec

“It is easier to build strong children than to repair broken men.”

—Frederick Douglass

Abstract

Strengthening the parent–child relationship in early childhood has the potential to serve as a buffer against multiple negative developmental outcomes. Waiting until problems are pervasive or severe can be more costly, and most families in need of treatment do not receive it. Prevention models offer the possibility of reaching more families and building resilience prior to the onset of debilitating mental health issues. This chapter reviews research on existing PCIT-based prevention models across the continuum from universal to indicated prevention and describes in detail Family Camp, a selective prevention model designed to be implemented by natural helpers (i.e., lay health workers or other community members). Key adaptations of the Family Camp model include (1) reducing the intensity of the intervention for children with subclinical problem behaviors, (2) user-friendly materials that facilitate implementation by natural helpers, (3) increased focus on fathers and the importance of the father–child relationship, (4) intentional discussion about heritage and culture to address acculturation-related chal-

lenges, and (5) guidelines to increase the portability of the intervention within community settings. Finally, we offer recommendations for the future directions in the development, research, and implementation of PCIT prevention models, with a focus on developing a continuum of care.

Why PCIT-Based Prevention Models?

As a treatment model, PCIT has 40 years of empirical support. It demonstrates large effect sizes for the reduction of childhood conduct problems and the improvement of parenting skills (Niec, Barnett, Prewett, & Shanley, 2016; Schuhmann, Foote, Eyberg, Boggs, & Algina, 1998). Increasingly, support has been found for the use of PCIT to address childhood internalizing problems as well (Carpenter, Puliafico, Kurtz, Pincus, & Comer, 2014). Given the strong findings that support the treatment approach, is there a need to create alternative models? After all, PCIT can be conceptualized as prevention in itself—that is, it is an indicated prevention intervention for children already demonstrating disruptive behaviors who are at risk of developing severe conduct problems in later childhood and adolescence (Munoz, Mrazek, & Haggerty, 1996).

I. Brodd · C. E. Schoonover · L. N. Niec (✉)
Department of Psychology, Center for Children,
Families, and Communities, Central Michigan
University, Mount Pleasant, MI, USA
e-mail: niec11@cmich.edu

Do we *need* to adapt the model to provide options for other levels of preventive interventions?

A number of important reasons exist to explain why the answer to the question is yes. One key reason to consider PCIT-based prevention models is to address family or child risk factors before symptoms manifest or become severe. Conduct problems are one of the most costly mental health issues in the US. At the societal level, the costs of childhood conduct problems are related to lost productivity, criminal justice involvement, and medical and behavioral health services involvement (Aos, Lieb, Mayfield, Miller, & Pennucci, 2004; Cohen & Piquero, 2009). Between the ages of 7 and 13 years, a child with unaddressed conduct problems will require about \$70,000 more in social spending than a peer without conduct problems (Foster, Jones, & the Conduct Problems Prevention Research Group, 2005). By the age of 28 years, adults who experienced untreated childhood conduct problems require ten times the social spending that is required by individuals without conduct problems (Scott, Knapp, Henderson, & Maughan, 2001). Beyond the costs to society, conduct problems take their toll on individuals and families, being associated with parent stress (Donenberg & Baker, 1993), increased risk for child maltreatment (Whipple & Webster-Stratton, 1991), and child and adolescent comorbid mental health problems, including issues such as substance use and suicide (Dodge, Greenberg, Malone, & the Conduct Problems Prevention Research Group, 2008). A universal prevention model of PCIT—which would be available for all parents—would have the potential to strengthen parent-child relationships and build family resilience in order to prevent the onset of conduct problems or ameliorate the risk of child abuse; while a selective prevention approach to PCIT would target families at-risk for parent-child conflict. By addressing risks and building resilience before problems become serious, both levels of prevention have the potential to reduce the social and personal costs of parent-child conflict and childhood conduct problems. Development of PCIT models at the universal and selective prevention levels

offers the potential for clinicians to provide a continuum of services that are consistent in approach but offer increasing intensities of intervention.

A second important reason to consider prevention models of PCIT is that prevention models are generally less intensive than treatment (e.g., Niec et al., 2014). They may be shorter, require fewer resources to deliver, and may be implemented by interventionists with less training than licensed mental health care providers (e.g., Acevedo-Polakovich, Niec, Barnett, & Bell, 2013; Calzada et al., 2005). It is less costly to provide prevention than for children to go untreated (Dunlap et al., 2006). Thus, prevention models may allow agencies to reach more families than possible with treatment models. Currently, mental health provider shortages, slow dissemination progress, and a dearth of sustainable treatment programs all play a role in limiting access to evidence-based treatment (Niec et al., 2016). Upwards of two-thirds of the families in need of services do not receive them (Kazdin, 2011) and many families who present for treatment do not benefit from it (McMahon & Forehand, 2003). Thus, developing interventions that can extend the reach to underserved families is a critical goal.

Prevention approaches also offer the opportunity to create models that may be less stigmatizing and more community based. Families from ethnic minority backgrounds, for example, are less likely to access services due to issues such as the perception of stigma surrounding mental health treatment or discomfort with formal health care settings (Clement et al., 2015). Although these families are less likely to receive services, their risk for parent-child conflict or childhood conduct problems may be greater, as they may be more likely to face multiple stressors, such as those associated with poverty and acculturation, that can disrupt effective parenting, putting children at higher risk for conduct problems (Domenech Rodríguez, Davis, Rodríguez, & Bates, 2006; Parra Cardona et al., 2009).

A fourth reason to consider PCIT-based prevention models is that the PCIT model may be particularly suited to reaching families that are historically underserved (Niec et al., 2014). The

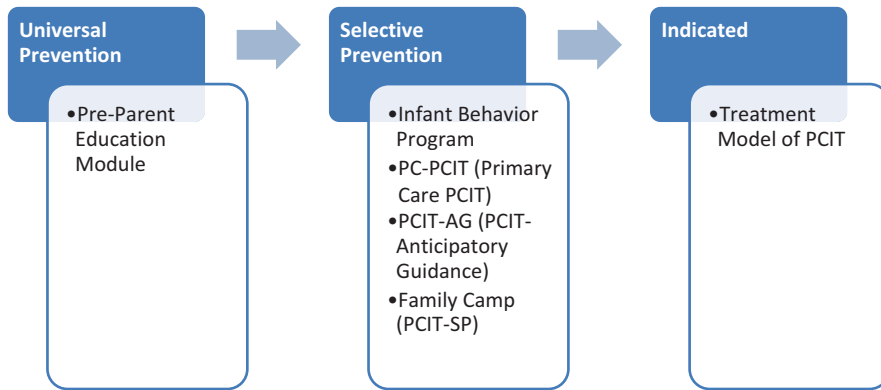


Fig. 1 PCIT models

primary mechanisms of change in the PCIT approach include active practice and in vivo coaching: parents learn new strategies to change their children's behaviors by practicing those strategies in real-life situations, rather than merely role-playing or watching videos of other parents using the strategies. Further, in families in which education and literacy rates are low, interventions that rely primarily on didactic approaches or reading materials may be less likely to be effective (Knapp & Deluty, 1989). PCIT provides a unique intervention format and a powerful, effective approach to changing parent behavior. Harnessing these strengths in the form of community-based prevention models may increase the access to effective services for families from a wide range of backgrounds (Fig. 1).

PCIT-Based Prevention So Far

To date, five PCIT-based prevention models have been published. Each model targets a different population and uses a different delivery format from one another and from the original treatment model. The five models include (1) a Pre-Parent Education Module for young adults (Lee, Wilsie, & Brestan-Knight, 2011), (2) a CDI-only model for at-risk infants, the Infant Behavior Program (Bagner et al., 2016; Bagner, Rodríguez, Blake, & Rosa-Olivares, 2013), (3) a four-session group intervention for preschoolers with emerging behavior problems, Primary Care PCIT

(PC-PCIT; Berkovits, O'Brien, Carter, & Eyberg, 2010), (4) a set of anticipatory guidance reading materials based on PCIT handouts, PCIT-Anticipatory Guidance (PCIT-AG; Berkovits et al., 2010), and (5) a selective prevention model designed to be implemented by lay health workers, Family Camp (Acevedo-Polakovich et al., 2014; Niec et al., 2014). Below, we briefly review each model, including existing empirical support (see Table 1).

Lee et al. (2011) developed a Pre-parent Education Module, adapted from the treatment PCIT protocol. The model offers a universal prevention format of PCIT designed to be taught to young adults prior to becoming parents. In their evaluation of the model, Lee and colleagues (2011) delivered modified versions of the Child-Directed Interaction (CDI) and Parent-Directed Interaction (PDI) teach sessions during students' participation in a developmental psychology course. Following each didactic presentation, students practiced the basic parent-child interaction skills in class. During PDI instruction, students were taught fundamental principles of discipline (e.g., giving effective commands, important components of time-out), but not specifically how to implement time-out. Results from the study suggested that students who received pre-parent education possessed significantly greater knowledge of PCIT parenting principles than students who received general instruction in developmental psychology or those who had not yet taken the course. Students who

Table 1 PCIT prevention models

Study	Intervention model	Study design	Target population	Sample	Assmnt
Berkovits et al. (2010)	Primary Care PCIT or PCIT Anticipatory Guidance: 4-session Clinician- or Self-guided PCIT	Randomized Control Trial	Children age 3–6 with raw ECBI Intensity = 68–132	30 mother–child dyads	ECBI
Bagner et al. (2016)	Infant Behavior Program: PCIT with infants 5–7 session in-home CDI	Randomized Control Trial	Infants age 12–15 months: 75th percentile or higher on BITSEA	60 mother–infant dyads	ITSEA, DPICS-III
Lee et al. (2011)	Pre-Parent Education Module: PCIT didactic taught in developmental psychology course	Randomized Control Trial	19–25-year-old undergraduate students	300 Psychology students	PCIT Content Quizzes, DPICS-III
Acevedo-Polakovich et al. (2014) Niec et al. (2014)	Family Camp, PCIT-Selective Prevention delivered by natural helpers	Qualitative: Intervention development study	Parents of children ages 2–7	37 natural helpers 50 parents	NA

Note. *Assmnt* assessment, *PCIT* parent-child interaction therapy, *ECBI* Eyberg Child Behavior Inventory, *BITSEA* Brief Infant-Toddler Social and Emotional Assessment, *ITSEA* Infant-Toddler Social and Emotional Assessment, *DPICS-III* Dyadic Parent-Child Interaction Coding System-Third Edition

received the pre-parent education module also used more child-centered skills (e.g., labeled praises and unlabeled praises) during a standardized observation of their interactions with a confederate. Thus, brief instruction using an adaptation of PCIT content increased young adults' knowledge of positive parenting practices. Although it is unknown whether this knowledge generalized to the students' eventual parenting, it is a promising step to developing a method through which a universal format of PCIT might be delivered.

Bagner et al. (2013, 2016) further extended the work on PCIT prevention models with the development of the Infant Behavior Program, a brief, selective prevention model targeting infants 12–15 months of age. Families were randomly assigned to receive the parenting intervention or standard pediatric primary care (Bagner et al., 2016). The Infant Behavior Program included only child-directed parenting skills (no parent-directed interaction) and was delivered in the home. Parents received a CDI teach session plus five to seven coaching sessions. The treatment CDI protocol was maintained with regard to coding and coaching, with minor adaptations to pro-

vide developmentally appropriate examples of the child-centered skills. Skill-mastery criteria for parents were adjusted to account for infants' lower rates of verbalization/vocalization (Bagner et al., 2013). Mothers receiving the intervention reported a lower incidence of problem behaviors in their children, demonstrated an increase in their use of "Do" skills, and showed a reduction in their use of "Don't" skills, with positive changes generally maintained at 6-months follow-up. Additionally, at follow-up, toddlers in the intervention group were more compliant than those in the control group with mothers' commands during a clean-up situation.

While the prevention model for infants only taught CDI skills, Berkovits et al. (2010) developed two prevention models that included both phases of PCIT and were meant for delivery within a pediatric primary care setting. Each model contained the same content, but different delivery formats: one model included four therapist-led group sessions (CDI Teach, CDI Coach, PDI Teach, PDI Coach), while the second model included written anticipatory guidance materials and was self-guided. Participants in both conditions received handouts describing

child behavior management techniques based on PCIT and parenting “tip sheets” (e.g., describing how parents are models for their children) all based on the handouts in the PCIT treatment protocol. Parents in the self-guided condition received the CDI and PDI information as written materials but did not meet with therapists and did not receive in vivo coaching. Following both interventions, mothers’ perceptions of child behavior problems (scores on the Eyberg Child Behavior Inventory), parenting efficacy, and ratings of treatment acceptability and adherence did not differ across conditions. Although there was no observation of actual parenting behavior, mothers in both groups reported lower levels of misbehavior following intervention.

Family Camp: PCIT-Selective Prevention

With the exception of the anticipatory guidance reading materials (Berkovits et al., 2010), the prevention models described above share in common their delivery by interventionists with graduate degrees in a mental health field. Unfortunately, in many areas of the US—and in many countries globally—shortages of mental health providers mean that families in need of services may languish on long waitlists or have nowhere to turn to receive effective parenting programs (Kazdin, 2008; Kazdin & Blase, 2011; Satcher, 2000). Within the US, over 5000 regions have been designated as mental health professional shortage areas (HPSA-Mental Health, 2018). Innovative delivery strategies for PCIT could help to address need in these provider shortage areas. One solution may be to adapt PCIT into a format suitable for implementation by natural helpers. Natural helpers are defined as lay health workers or other community members to whom families naturally turn for support and assistance with parenting problems (Israel, 1985). The use of natural helpers in community prevention programs is increasing as a method of combating service disparities (Ayala, Vaz, Earp, Elder, & Cherrington, 2010; Barnett, Lau, & Miranda, 2018; Koskan, Hilfinger Messias, Friedman, Brandt, & Walsemann, 2013;

Rhodes, Foley, Zometa, & Bloom, 2007; Stacciarini et al., 2012). Some evidence suggests that natural helpers can be as effective as licensed professionals in delivering mental health interventions, particularly behavioral or cognitive behavioral interventions (Acevedo-Polakovich et al., 2013; Montgomery, Kunik, Wilson, Stanley, & Weiss, 2010).

Family Camp is a selective prevention model of PCIT, informed by parents from ethnically diverse backgrounds, that was designed to be implemented by natural helpers (Acevedo-Polakovich et al., 2014; Niec et al., 2014). Similar to the treatment model of PCIT, the primary goals of Family Camp are to strengthen the parent-child relationship, increase parents’ positive parenting practices, and improve children’s behaviors. However, Family Camp was designed specifically as an intervention for children whose problem behaviors have not reached clinically significant levels.

Family Camp was developed using a community-based participatory research-informed approach in order to better integrate (1) the needs of parents regarding assistance with parenting issues and (2) the needs of natural helpers regarding training and implementation of a PCIT-based parenting intervention. Fifty parents of Latina/o background and 37 natural helpers participated in six focus groups. Some of the key issues expressed by parents and natural helpers included (1) a need for more community support for parents, (2) acceptance of the core components of the PCIT model, (3) a need for fathers to be actively engaged in parenting interventions, and (4) an interest in seeing the model implemented by community members (e.g., teachers, elders, law enforcement; Acevedo-Polakovich et al., 2014; Niec et al., 2014).

Structure of the Program

Family Camp maintains all the core components of the treatment model of PCIT. It includes ten sessions and can be offered in an individual family or a group format. Each of the intervention phases, Child-Directed Interaction (CDI) and

Parent-Directed Interaction (PDI), consist of one teach session and three coaching sessions. Although both phases are comparable to the treatment protocol in content, because the target population for Family Camp includes only children with subclinical problem behaviors, progress from CDI to PDI is not contingent on parents reaching the mastery criteria of the skills (see Table 2). The treatment protocol of PCIT emphasizes the reduction of children's conduct problems from clinical levels to within normal limits; however, a key component of Family Camp is the development of children's psychosocial competencies. Weekly throughout the intervention, children's positive behaviors are assessed using a brief, standardized, narrow-band parent-report measure, the Psychosocial Strengths Inventory for Children and Adolescents (PSICA; see chapter "Building Resilience Through PCIT: Assessing Child Adaptive Functioning and Parent-Child Relationship Quality" for a review).

Table 2 Family camp overview

Session number	Session content
Session 1	<i>Orientation.</i> Overview of the program and parents complete assessment materials
Session 2	<i>CDI Teach.</i> CDI teach session to demonstrate the PRIDE skills and discuss at-home special time practice
Sessions 3–5	<i>CDI Coach.</i> Code and coach CDI skills with all parents. Review PSICA graph
Session 6	<i>PDI Teach.</i> PDI teach session to demonstrate discipline program. Parents complete ECBI
Session 7	<i>PDI Coach 1—Mr. Bear.</i> Demonstrate the discipline procedure to the child and coach PDI skills with parents. Review PSICA graph
Session 8	<i>PDI Coach 2.</i> Code and coach PDI skills with parents. Introduce House Rules (if needed). Review PSICA graph
Session 9	<i>PDI Coach 3.</i> Code and coach CDI and PDI skills with parents. Explain public behavior procedure (if needed). Review PSICA graph
Session 10	<i>Graduation.</i> Completion of all post-camp materials and review of family's progress

Note. *CDI* Child-Directed Interaction, *PSICA* Psychosocial Strengths Inventory for Children and Adolescents, *PDI* Parent-Directed Interaction, *ECBI* Eyberg Child Behavior Inventory

Key adaptations of the PCIT protocol for the Family Camp model were based on the existing literature on prevention interventions for parenting (e.g., Calzada et al., 2005) as well as the qualitative feedback from parents and natural helpers (e.g., Niec et al., 2014) and focused on (1) reducing the intensity of the intervention for children with subclinical problem behaviors, (2) creating user-friendly materials that facilitate consistent and effective implementation by natural helpers, (3) using language that is specifically inclusive of fathers and demonstrates the importance of the father–child relationship, (4) including time for discussion of parenting issues related to culture and heritage, as appropriate, and (5) providing guidelines to increase the portability of the intervention within community settings (e.g., schools, churches, family centers).

The Family Camp manual includes detailed scripts for each session and is designed to guide natural helpers in presenting information in a way that ensures key concepts are covered evenly. For example, the Family Camp materials include brief videos to facilitate standardized administration by natural helpers who may have varied levels of experience working with parents. Videos demonstrate the PRIDE skills and the correct implementation of the discipline procedure as well as providing testimonials from parents who have completed the intervention.

Although PCIT has always welcomed and encouraged the participation in treatment of all caregivers who are important in a child's life, as in other parenting interventions, fathers have been seriously underrepresented (Bagner & Eyberg, 2003). Evidence suggests that fathers' engagement in their children's treatment has a significant impact on the maintenance of beneficial treatment effects (Bagner & Eyberg, 2003; Webster-Stratton, 1985). Compared to mothers from involved-father families, mothers in absent-father families (e.g., no male caregiver in the home) reported a loss of treatment gains 4 months after ending PCIT (Bagner & Eyberg, 2003). Thus, we developed Family Camp with a specific aim to increase the participation of fathers and other male caregivers. Throughout the intervention, Family Camp materials (1) add language

that, different from many relationship-focused interventions, includes conventional masculine norms (Triemstra, Niec, Peer, & Christian-Brandt, 2017), (2) provide testimonials from fathers who completed the program, and (3) emphasize the influence of fathers on their children. Further, integrating Family Camp into community settings makes the services more accessible to both mothers and fathers who may be reluctant to seek out assistance from mental health or social services agencies due to perceptions of mental health stigma (McBride & Rane, 1997; Meyers, 1993).

Finally, to increase the portability of the intervention into community settings (e.g., schools, places of religious worship, family centers), emphasis is placed on the effective use of in vivo coaching without expensive audio visual equipment. Low-cost, feasible alternatives are encouraged such as interventionist coaching in the same room as the parent and child. Cell phones are also possible to use to allow the interventionist to provide coaching at a distance in a large room.

Session One: Orientation

The first Family Camp session includes the interventionist and parents, without children, and typically lasts approximately 60–90 min. In focus groups, parents expressed the preference to meet their interventionist prior to beginning the program (Niec et al., 2014); thus, the primary goals of the orientation session are to establish rapport and develop a relationship between the interventionist and parents. Parents are provided an overview of the program using video testimonials from others who have successfully completed the program, and parents who are beginning the program are invited to share their experiences of parenting and how they perceive that their own parents and their heritage are influencing their current practices. This intentional discussion about heritage and culture seeks to address acculturation-related challenges that parents may be experiencing and that may exacerbate parent-child conflict. During the orientation session, parents also complete assessment measures to

provide baseline ratings of parenting stress and perceptions of their children's behaviors (Parenting Stress Index, Fourth Edition, Short Form, PSI-IV-SF; Eyberg Child Behavior Inventory, ECBI; PSICA).

Session Two: CDI Teach

During the second session, parents and children attend together. Parents complete the PSICA to monitor their children's psychosocial competence, and interventionists use parents' responses on the PSICA to tailor their presentation of the CDI skills (e.g., explaining how labeled praises will increase a child's sharing with siblings). The didactic portion of the Family Camp teach session is brief and succinct relative to the teach session in the treatment protocol, as PCIT therapists have sometimes described the didactic as a barrier to parent engagement (Christian, Niec, Acevedo-Polakovich, & Kassab, 2014) and families from lower socioeconomic backgrounds may find it uncomfortable and awkward (Niec et al., 2014). Further, findings show that parents' CDI skills improve after coaching even without an intensive didactic (Shanley & Niec, 2010). After a brief (approximately 20-min) introduction to the child-centered (i.e., CDI) skills, during which parents view short videos to on the "Do" and "Don't" skills, interventionists begin coaching parents in child-led play with their children.

Similar to the treatment model, parents are provided handouts explaining the child-centered skills and appropriate toys for Special Time, and CDI homework sheets to record their practice over the week.

Sessions Three Through Five: CDI Coaching

Following the CDI teach session, parents and children attend three CDI coaching sessions to increase warm and respectful interactions through in vivo coaching of the child-centered skills. At the start of each session, parents complete the PSICA and interventionists review parents' com-

pletion of the home practice. In preparation for coaching, interventionists work with parents to identify the positive opposites of their children's misbehaviors. As with the treatment model, parents are coded in their use of the child-centered skills to assess their skill gains and tailor the coaching to their specific needs.

The Family Camp manual provides examples of specific coaching strategies to use during in vivo coaching for specific parenting issues (e.g., modeling, labeled praises, process comments, prompting; Niec, Eyberg, Funderburk, & Acevedo, 2017). After coaching, interventionists review the CDI skills progress sheet with parents. Child-centered skills are monitored, and interventionists connect increases in parents' "Do" skills to improvements in the child's psychosocial competencies. During the third CDI coaching session, the PSICA graph is reviewed. An emphasis is placed on the relationship between parents' skill practice at home and increases in their children's prosocial behaviors.

Session Six: PDI Teach

During session six, interventionists teach parents how to give effective directions and a safe, effective, discipline procedure to use when misbehavior occurs. As with the CDI teach session, educational videos are used to help parents understand how to make their commands effective and how to implement discipline calmly and consistently. Interventionists describe the components of effective commands (e.g., necessary, single, said respectfully) and reasons for following the rules of effective commands, as well as how to use time-out effectively. Modifications from the treatment version of the time-out procedure take into account that the target population of Family Camp includes children without clinical levels of behavior problems. Interventionists and parents role-play the discipline procedure at the end of the session. Handouts are provided to parents that summarize the contents of the session. Easy-to-read flow charts illustrate the discipline sequence.

Session Seven: PDI Coach 1

In this session, children are taught the time-out procedure through a Mr. Bear role-play. In addition to providing the child a demonstration of the time-out procedure and consequences for obeying or disobeying parents' commands, this role-play allows parents to practice implementing the time-out procedure before they need to use it with their own child. Intensive in vivo coaching of the time-out procedure helps parents learn to implement the discipline confidently and correctly. After the role-play in which Mr. Bear obeys, needs a warning, and goes to time-out, interventionists coach parents in giving effective play commands and following through when their child either obeys or disobeys. As in CDI coaching sessions, the Family Camp manual supports interventionists with PDI coaching strategies such as coaching warnings (e.g., "nicely timed warning") and helping parents to regulate their emotion during the discipline phase. For example, coaches are given examples of how to educate and remind parents why the discipline steps are important (e.g., "this will teach him/her to respect you"). In addition to continuing to complete Special Time homework as in the prior weeks, parents are provided with a PDI homework sheet and instructions for practicing PDI play commands during Special Time at home.

Session Eight: PDI Coach 2

In the second PDI coaching session, interventionists code parents' PDI skills and in addition to coaching play commands, begin to incorporate real-life and clean-up commands. After check-in and briefly coaching CDI play, interventionists introduce PDI coding to measure parents' use of effective commands and follow through when their child obeys or disobeys. The remainder of the session is spent on PDI coaching with the manual providing strategies for interventionists to support parents in making commands effective and mastering the discipline procedure. Additionally, during this session interventionists

aid parents in identifying two to four situations in which they will begin giving direct commands outside of Special Time, to begin generalizing PDI skills at home. Using the ECBI as a guide, interventionists work with parents to identify appropriate house rules, if needed, for aggressive and destructive behaviors, misbehavior that is never appropriate (e.g., spitting), and sneaky behaviors that aren't discovered until after they have occurred, such as stealing money. Handouts are provided to parents to help them recognize behaviors for which house rules may be used and those for which house rules should not be used; for these, alternative strategies are described. For nonaggressive, attention-seeking behaviors, vague, and subjective behaviors, such as whining, parents are given examples of how to praise positive opposites.

Session Nine: PDI Coach 3

The last coaching session, PDI coach 3, includes coding for both CDI and PDI skills to capture parents' skill change across the intervention. Interventionists then provide coaching in CDI skills, as needed, and coaching in PDI, incorporating clean-up and other real-life commands. In this session, public behavior procedures are introduced if parents are concerned about their children's behaviors when going to restaurants and stores. As in other sessions, handouts are provided with recommendations for what to do before, during, and after an outing and how to use time-out in public, if needed.

Session Ten: Graduation

The final session of Family Camp is approximately 90–120 min long to allow for a review of parents' progress through the program and completion of post-intervention measures (e.g., ECBI, PSICA, PSI-IV-SF). Interventionists review the PSICA graph, tying together the parents' increased use of PRIDE skills and their children's improved behavior. Emphasis is given to the continued use of skills developed through

out the program to maintain and continue to improve the child's behavior. Additionally, as in prior sessions, the Family Camp manual aids interventionists in presenting information on other behavior management strategies such as special ignoring, rewarding positive opposites or using if-then statements with handouts for parents. Treatment is concluded with certificates of achievement, symbolizing the family's hard work.

Measuring Progress

Prevention interventions offer challenges in the assessment of family progress and outcome that are not necessarily faced in the implementation of treatment interventions (Proctor & Brestan-Knight, 2016). Family Camp targets children who do not demonstrate clinically significant behavior problems; thus, measuring changes in conduct problems is of less relevance and a focus on building child competencies is key. The Psychosocial Strengths Inventory for Children and Adolescents (PSICA), a 36-item parent-report measure, assesses children's psychosocial competencies, including prosociality, compliance to caregivers, and attention and affective regulation (Niec, Peer, & Courrégé, 2018). The measure has demonstrated excellent internal consistency and preliminary construct validity (see chapter "Building Resilience Through PCIT: Assessing Child Adaptive Functioning and Parent–Child Relationship Quality").

Using this strength-based measure is important to assess increases in psychosocial competencies and to help parents identify and reinforce children's positive behaviors during participation in Family Camp. Further, the PSICA is a brief and user-friendly tool for participants, and it is affordable for administration by natural helpers. The use of the PSICA is a crucial tool for tracking treatment progress by focusing on children's increasing appropriate behavior and can help expand the reach of Family Camp to at-risk and underserved families. As caregivers increase warm, positive interactions with their children through CDI and use safe and consistent discipline throughout PDI,

interventionists use the PSICA graph across sessions to illustrate to parents how they are helping shape and increase their child's social competencies. While monitoring reductions in problem behaviors, a strategy used in treatment, may not always capture behavioral change in prevention interventions, a focus on increased prosocial interaction, compliance to parents' commands, and greater attention and affect regulation as measured by the PSICA lend support for meaningful improvement in children's behavior after participating in Family Camp.

Next Steps in the Development and Implementation of PCIT Prevention Models

Despite early support for a variety of prevention models based on PCIT, no single format has emerged as the strongest. With the exception of the Infant Behavior Program, none of the existing models have yet been evaluated with a controlled trial that provides observation of actual behavior to evaluate positive change (Bagner et al., 2016). To date, PCIT prevention models demonstrate the ability to (1) increase knowledge of positive parenting practices in young adults, (2) increase the use of child-centered skills in parents of toddlers, and (3) provide a feasible, brief model for implementation in primary care settings. These findings lend support for the development of a continuum of services to address concerns related to the parent-child relationship and children's conduct.

In order to extend the reach of PCIT prevention models to the families in need of them, we must continue to evaluate alternative delivery formats, such as implementation by natural helpers/lay health workers. Two important next steps in advancing PCIT-based prevention models are (1) development of a continuum of services that offer increasing intensities of interventions for children with subclinical problem behaviors and (2) continued research of the effectiveness (including the long-term outcomes) of PCIT-based prevention models.

Child conduct problems are costly at the individual, family, and societal levels, but the contin-

ued shortages of qualified mental health providers means that many families who are in need are unable to get treatment before symptoms become severe. Innovative adaptations of PCIT to establish a continuum of services, from universal to indicated prevention, have the potential to increase access to effective interventions for underserved families. Additionally, development of interventions that are offered in the community by natural helpers may further reduce stigmatization related to seeking mental health services; families at risk for parent-child conflicts can begin to receive early intervention by turning to the people they naturally seek for support.

Research to date suggests that PCIT prevention models are effective at decreasing children's problematic behaviors, and interventions have been well-received by potential interventionists and parents who would receive services. Additional research is needed to assess the sustainability and dissemination of such prevention programs. For example, in the treatment model of PCIT, families meet mastery criteria for the child-centered skills before they progress to the second phase of treatment. Prevention interventions may be shorter, less intensive, and focused on building resilience; thereby making them more sustainable within the community. More empirical support is needed to understand how positive parenting skills develop outside of the treatment context and how long intervention gains are maintained. A continuum of services may provide a natural format within which to assess the maintenance of gains and to offer additional services, as needed. By maintaining the core components of PCIT across the continuum, families can receive increasing intervention intensities. Anticipatory guidance reading materials based on PCIT handouts may be provided to all parents and in vivo coaching, which provides parents guided practice in using the skills, may be offered to families with increased risk factors, such as when children are demonstrating subclinical behavior problems. Given the extensive empirical support for the treatment model of PCIT, research on prevention models should focus on factors related to identifying and reducing the barriers interventionists experience in implementing services, families'

access to services, and measuring improvements in children's strength-based competencies.

Conclusions

Preliminary evidence supports both the need for and the feasibility of providing PCIT models that span the continuum of prevention levels from universal to indicated. Family Camp is a preventive parenting intervention developed to address the needs of families who have early risk factors that make it more likely for them to experience parent-child conflict or child conduct problems. This brief, selective-prevention model based on PCIT was designed to be responsive to the presenting issues of families who have historically experienced mental health disparities, such as limited access to mental health care. These families often experience other environmental stressors that place children at risk for serious negative outcomes (Domenech Rodríguez et al., 2006; Parra Cardona et al., 2009). The delivery of Family Camp by trained natural helpers may allow for greater dissemination of the intervention to these underserved families, and the detailed treatment manual with educational videos across sessions, may facilitate the maintenance of program fidelity. Strengthening the parent-child relationships of families who are most at risk has the potential to reduce negative outcomes for children in many domains of functioning and to make a significant public health impact (Barnett et al., 2018; Masten & Cicchetti, 2010).

References

- Acevedo-Polakovich, I. D., Niec, L. N., Barnett, M. L., & Bell, K. M. (2013). Incorporating natural helpers to address service disparities for young children with conduct problems. *Children and Youth Services Review, 35*(9), 1463–1467.
- Acevedo-Polakovich, I. D., Niec, L. N., Barnett, M. L., Bell, K. M., Aguilar, G., Vilca, J., ... Peer, S. O. (2014). Exploring the role of natural helpers in efforts to address disparities for children with conduct problems. *Children and Youth Services Review, 40*, 1–5.
- Aos, S., Lieb, R., Mayfield, J., Miller, M., & Pennucci, A. (2004). *Benefits and costs of prevention and early intervention programs for youth* (Report No. 04-07-3901). Olympia: Washington State Institute for Public Policy. Retrieved from <http://www.wsipp.wa.gov/Reports/121>.
- Ayala, G. X., Vaz, L., Earp, J. A., Elder, J. P., & Cherrington, A. (2010). Outcome effectiveness of the lay health advisor model among Latinos in the United States: An examination by role. *Health Education Research, 25*(5), 815–840.
- Bagner, D. M., Coxe, S., Hungerford, G. M., Garcia, D., Barroso, N. E., Hernandez, J., & Rosa-Olivares, J. (2016). Behavioral parent training in infancy: A window of opportunity for high-risk families. *Journal of Abnormal Child Psychology, 44*(5), 901–912.
- Bagner, D. M., & Eyberg, S. M. (2003). Father involvement in parent training: When does it matter? *Journal of Clinical Child and Adolescent Psychology, 32*, 599–605. https://doi.org/10.1207/s1537442jccp3204_13
- Bagner, D. M., Rodríguez, G. M., Blake, C. A., & Rosa-Olivares, J. (2013). Home-based preventive parenting intervention for at-risk infants and their families: An open trial. *Cognitive and Behavioral Practice, 20*(3), 334–348.
- Barnett, M. L., Lau, A. S., & Miranda, J. (2018). Lay health worker involvement in evidence-based treatment delivery: A conceptual model to address disparities in care. *Annual Review of Clinical Psychology, 14*, 185–208. Advance online publication.
- Berkovits, M. D., O'Brien, K. A., Carter, C. G., & Eyberg, S. M. (2010). Early identification and intervention for behavior problems in primary care: A comparison of two abbreviated versions of parent-child interaction therapy. *Behavior Therapy, 41*(3), 375–387.
- Calzada, E. J., Caldwell, M. B., Brotman, L. M., Brown, E. J., Wallace, S. A., McQuaid, J. H., ... O'Neal, C. R. (2005). Training community members to serve as paraprofessionals in an evidence-based, prevention program for parents of preschoolers. *Journal of Child and Family Studies, 14*(3), 387–402.
- Carpenter, A. L., Puliafico, A. C., Kurtz, S. M., Pincus, D. B., & Comer, J. S. (2014). Extending parent-child interaction therapy for early childhood internalizing problems: New advances for an overlooked population. *Clinical Child and Family Psychology Review, 17*(4), 340–356.
- Christian, A., Niec, L. N., Acevedo-Polakovich, I. D., & Kassab, V. (2014). Dissemination of an evidence-based parenting program: Clinician perspectives on training and implementation. *Children and Youth Services Review, 43*, 8–17. <https://doi.org/10.1016/j.childyouth.2014.04.005>.
- Clement, S., Schuman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., ... Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine, 45*(1), 11–27.
- Cohen, M. A., & Piquero, A. R. (2009). New evidence on the monetary value of saving a high risk youth. *Journal of Quantitative Criminology, 25*(1), 25–49.

- Dodge, K. A., Greenberg, M. T., Malone, P. S., & Conduct Problems Prevention Research Group. (2008). Testing an idealized dynamic cascade model of the development of serious violence in adolescence. *Child Development, 79*, 1907–1927.
- Domenech Rodríguez, M., Davis, M. R., Rodríguez, J., & Bates, S. C. (2006). Observed parenting practices of first-generation Latino families. *Journal of Community Psychology, 34*(2), 133–148.
- Donenberg, G., & Baker, B. L. (1993). The impact of young children with externalizing behaviors on their families. *Journal of Abnormal Child Psychology, 21*(2), 179–198.
- Dunlap, G., Strain, P. S., Fox, L., Carta, J. J., Conroy, M., Smith, B. J., ... Sailor, W. (2006). Prevention and intervention with young children's challenging behavior: Perspectives regarding current knowledge. *Behavioral Disorders, 32*(1), 29–45.
- Foster, E. M., Jones, D. E., & Conduct Problems Prevention Research Group. (2005). The high costs of aggression: Public expenditures resulting from conduct disorder. *American Journal of Public Health, 95*(10), 1767–1772.
- Health Professional Shortage Area (HPSA)-Mental Health. (2018). [Map showing geographic regions that are experiencing shortages of mental health providers March 30, 2018]. Storage Areas. Retrieved from <https://datawarehouse.hrsa.gov/topics/shortageAreas.aspx>.
- Israel, B. A. (1985). Social networks and social support: Implications for natural helper and community level interventions. *Health Education Quarterly, 12*, 65–80.
- Kazdin, A. E. (2008). Evidence-based treatments and delivery of psychological services: Shifting our emphases to increase impact. *Psychological Services, 5*(3), 201–215.
- Kazdin, A. E. (2011). Evidence-based treatment research: Advances, limitations, and next steps. *American Psychologist, 66*(8), 685–698.
- Kazdin, A. E., & Blase, S. L. (2011). Rebooting psychotherapy research and practice to reduce the burden of mental illness. *Perspectives on Psychological Science, 6*(1), 21–37.
- Knapp, P. A., & Deluty, R. H. (1989). Relative effectiveness of two behavioral parent training programs. *Journal of Clinical Child Psychology, 18*, 314–322.
- Koskan, A. M., Hilfinger Messias, D. K., Friedman, D. B., Brandt, H. M., & Walsemann, K. M. (2013). Program planners' perspectives of promotoras roles, recruitment, and selection. *Ethnicity and Health, 18*, 262–279.
- Lee, E. L., Wilsie, C. C., & Brestan-Knight, E. (2011). Using Parent-Child Interaction Therapy to develop a pre-parent education module. *Children and Youth Services Review, 33*(7), 1254–1261.
- Masten, A. S., & Cicchetti, D. (2010). Developmental cascades. *Development and Psychopathology, 22*, 491–495. <https://doi.org/10.1017/S0954579410000222>
- McBride, B. A., & Rane, T. R. (1997). Father/male involvement in early childhood programs: Issues and challenges. *Early Childhood Education Journal, 25*(1), 11–15.
- McMahon, R. J., & Forehand, R. L. (2003). *Helping the non-compliant child: Family-based treatment for oppositional behavior*. New York, NY: The Guilford Press.
- Meyers, S. A. (1993). Adapting parent education programs to meet the needs of fathers: *An ecological perspective*. *Family Relations, 42*, 447–452.
- Montgomery, E., Kunik, M., Wilson, N., Stanley, M., & Weiss, B. (2010). Can paraprofessionals deliver cognitive-behavioral therapy to treat anxiety and depressive symptoms? *Bulletin of the Menninger Clinic, 74*(1), 45–62.
- Munoz, R., Mrazek, P., & Haggerty, R. (1996). Institute of medicine report on prevention of mental disorders. *American Psychologist, 51*(11), 1116–1122.
- Niec, L. N., Acevedo-Polakovich, I. D., Abbenante-Honold, E., Christian, A. S., Barnett, M. L., Aguilar, G., & Peer, S. O. (2014). Working together to solve disparities: Latina/o parents' contributions to the adaptation of a preventive intervention for childhood conduct problems. *Psychological Services, 11*(4), 410–420.
- Niec, L. N., Barnett, M. L., Prewett, M. S., & Shanley, J. R. (2016). Group parent-child interaction therapy: A randomized control trial for the treatment of conduct problems in young children. *Journal of Consulting and Clinical Psychology, 84*(8), 682–698.
- Niec, L. N., Eyberg, E., Funderburk, B., & Acevedo, I. (2017). *Parent-Child Interaction Therapy Selective Prevention: Protocol manual*. Mount Pleasant, MI: CMU Center for Children, Families and Communities.
- Niec, L. N., Peer, S. O., & Courrégé, S. (2018). *Psychosocial strengths inventory of children and adolescents (PSICA): Preliminary psychometrics and potential applications*. Mount Pleasant, MI: Central Michigan University.
- Parra Cardona, J. R., Holtrop, K., Córdova, D., Escobar-Chew, A. R., Horsford, S., Tams, L., ... Fitzgerald, H. E. (2009). “Queremos aprender”: Latino immigrants' call to integrate cultural adaptation with best practice knowledge in a parenting intervention. *Family Process, 48*(2), 211–231.
- Proctor, K. B., & Brestan-Knight, E. (2016). Evaluating the use of assessment paradigms for preventive interventions: A review of the Triple P-Positive Parenting Program. *Children and Youth Services Review, 62*, 72–82.
- Rhodes, S. D., Foley, K. L., Zometa, C. S., & Bloom, F. R. (2007). Lay health advisor interventions among Hispanics/Latinos: A qualitative systematic review. *American Journal of Preventive Medicine, 33*(5), 418–427.
- Satcher, D. (2000). Mental health: A report of the Surgeon General-Executive summary. *Professional Psychology: Research and Science, 31*, 5–13.
- Schuhmann, E. M., Foote, R. C., Eyberg, S. M., Boggs, S. R., & Algina, J. (1998). Efficacy of parent-child interaction therapy: Interim report of a randomized trial with short-term maintenance. *Journal of Clinical Child Psychology, 27*(1), 34–45.
- Scott, S., Knapp, M., Henderson, J., & Maughan, B. (2001). Financial cost of social exclusion: Follow

- up study of antisocial children into adulthood. *BMJ*, 323(7306), 191–194.
- Shanley, J. R., & Niec, L. N. (2010). Coaching parents to change: The impact of in vivo feedback on parents' acquisition of skills. *Journal of Clinical Child & Adolescent Psychology*, 39(2), 282–287.
- Stacciarini, J. R., Rosa, A., Ortiz, M., Munari, D. B., Uicab, G., & Balam, M. (2012). Promotaras in mental health: A review of English, Spanish, and Portuguese literature. *Family & Community Health: The Journal of Health Promotion & Maintenance*, 35(2), 92–102.
- Triemstra, K. T., Niec, L. N., Peer, S. O., & Christian-Brandt, A. (2017). The influence of conventional masculine gender role norms on parental attitudes toward seeking psychological services for children. *Psychology of Men & Masculinity*, 18(4), 311–320. <https://doi.org/10.1037/men0000055>
- Webster-Stratton, C. (1985). The effects of father involvement in parent training for conduct problem children. *Journal of Child Psychology and Psychiatry*, 26(5), 801–810.
- Whipple, E. E., & Webster-Stratton, C. (1991). The role of parental stress in physically abusive families. *Child Abuse & Neglect*, 15(3), 279–291.