North Carolina Child Treatment Program (NC CTP)
Evidence-Based Treatment (EBT) Service Delivery Time Model Series

Clinical Service Delivery Time Model for Parent-Child Interaction Therapy (PCIT)

Case-level Time Estimate

PCIT Time Model Template

The *NC CTP Clinical Service Delivery Time Model (PCIT)* template was developed to support service utilization data collection, aggregation, and analysis at the level of the client, caseload, and agency. Additionally, it may be used to: establish agency-level service capacity; monitor intervention-specific processes and cost; and to develop a cost model that reflects PCIT clinical delivery requirements.

PCIT service utilization estimates and data should be interpreted with caution, under the guidance of a PCIT clinical expert, when applied to: clinical network development and contracting, establishment of service delivery payment rates, utilization management, and clinical performance monitoring. This template should not be used to facilitate training, treatment, fidelity monitoring, and/or clinical supervision, as these standards are established by the PCIT model developer and PCIT International (www.pcit.org).

The *NC CTP Clinical Service Delivery Time Model (PCIT)* defines a "typical" case as one in which PCIT is delivered in an outpatient setting, to a client presenting with moderate clinical complexity, in the primary language of both client and caregiver. Service delivery is described in terms of: **a)** total number of clinical encounters (in-session treatment); **b)** total clinical encounter time (hours); and **c)** total out-of-session clinical support activity time (hours). Case-level service utilization data may fall outside the "typical" range, yet remain acceptable clinically, due to case complexity and implementation-related factors.

NC CTP populated the NC CTP Clinical Service Delivery Time Model (PCIT) tool with case-level estimates to provide guidance regarding the development and sustainment of an outpatient PCIT program. Estimates are based on the peer-reviewed literature, PCIT trainer experience, and service utilization data from a large cohort of clients associated with NC CTP clinical trainees and graduates.

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PCIT Service Delivery Overview

- PCIT is a dyadic treatment model for young children with significant externalizing symptoms. It includes a minimum of eleven required clinical encounters (treatment sessions); the majority of community-based clients exceed eleven clinical encounters. Families typically progress through treatment as caregivers demonstrate PCIT skills mastery, and as clients demonstrate a reduction in targeted behaviors.
- The majority of clinical encounters include a client and primary caregiver; at least two caregiver-only sessions are conducted during a typical course of PCIT.
- Clinical encounters are typically conducted on a weekly basis over several months; less frequent sessions may adversely impact the achievement of targeted clinical outcomes. In select circumstances, a client may participate in two clinical encounters during a single week.
- A clinical encounter is typically 60 minutes in duration; however, PDI Coach sessions may exceed 60 minutes, up to three (3) times during the course of treatment.
- A typical course of community-based PCIT includes an estimated: **a)** 26 hours; and **b)** 42 minutes of clinical support activity time (out-of-session) for every 60-minute clinical encounter. Client and caregiver in-session participation time is approximately equal over the course of treatment.
- Case-level service utilization (clinical encounter number and time, and out-of-session clinical support time) may fall outside the "typical" range, yet remain clinically acceptable, due to case complexity and implementation-related factors.
- Treatment content and intensity, clinician fidelity, and clinical outcomes vary across a PCIT caseload due to child-, caregiver-, family-, clinician-, agency-, and systems-level factors.

Table One: PCIT Total Treatment Time Estimate Summary *(Case-level)*

Clinical Activities (Case-level)		**Treatment Time**	
		Typical Case [a] (Hours)	Typical Range [b] (Hours)
Total In-Session Activities		**25.5**	**12.0 - 39.0**
PCIT-specific activities [c]	(Table Two)	21.0	11.0 - 30.0
General clinical activities [d]	(Table Two)	4.5	1.0 - 9.0
Total Out-of-Session Activities [e]	(Table Three)	**18.5**	**7.5 – 32.6**
Total Treatment Time	(In-Session + Out-of-Session)	**44.0**	**19.5 – 71.6**
Ratio [f]	(In-Session) : (Out-of-Session)	**(1.0) : (0.7)** 60 min : 42 min	**(1.0) : (0.6) – (1.0) : (0.8)**

[a] "Typical case" included PCIT delivery in a community-based setting, to a client presenting with moderate clinical complexity, in the primary language of both client and caregiver.
[b] Service utilization data may fall outside the "typical" range, yet remain clinically acceptable, due to case complexity and implementation-related factors.
[c] PCIT-specific activities are defined per the PCIT protocol. [1, 2]
[d] General clinical activities are conducted in-session and include: client intake, additional clinical assessment, treatment and discharge planning, case coordination/communication, crisis management, and other general clinical activities.
[e] Clinical support activities are conducted out-of-session by a treating clinician and include: client intake, additional clinical assessment, treatment and discharge planning, case coordination/communication, crisis management, and other general clinical activities, clinical supervision/peer fidelity support/expert consultation, and other general support activities. These services are critical to successful PCIT implementation and improved clinical outcomes.
[f] A typical course of treatment includes an estimated 42 minutes of clinical support activity time (out-of-session) for every 60-minute clinical encounter (treatment session).

Table Two: PCIT Clinical Activities Estimates *(In-Session Activities)*

In-Session Activities [a] (Case-level)	**Clinical Encounters** (# Sessions)			**Total Treatment Time** [b] (Hours)		
	Typical Case	Typical Range		Typical Case	Typical Range	
		Minimum	Maximum		Minimum	Maximum
PCIT-specific Activities [c, d]						
Pre-treatment DPICS assessment	1	1	2	1.0	1.0	2.0
CDI Teach	1	1	2	1.0	1.0	2.0
CDI Coach	8	3	10	8.0	3.0	10.0
PDI Teach	1	1	2	1.0	1.0	2.0
PDI Coach [e]	8	4	10	8.0	4.0	10.0
Post-treatment DPICS (and graduation)	1	1	2	1.0	1.0	2.0
Optional graduation session [f]	0	0	1	0	0	1.0
PCIT Booster session [g]	1	0	1	1.0	0	1.0
Subtotal	**21**	**11**	**30**	**21.0**	**11.0**	**30.0**
General Clinical Activities (In-Session)						
Client intake [h]	0.5	0	1	0.5	0	1.0
Additional clinical assessment [i]	1	0	2	1.0	0	2.0
Treatment planning	0.5	0.5	1	0.5	0.5	1.0
Discharge planning	0.5	0.5	1	0.5	0.5	1.0
Case coordination/communication [j]	1	0	2	1.0	0	2.0
Crisis management [k]	1	0	2	1.0	0	2.0
Other general clinical activities	-	-	-	-	-	-
Subtotal	**4.5**	**1**	**9**	**4.5**	**1.0**	**9.0**
TOTAL IN-SESSION ACTIVITIES	**25.5**	**12**	**39**	**25.5**	**12.0**	**39.0**

[a] Includes general and PCIT-specific clinical activities delivered during a clinical encounter (treatment session); multiple activities may be delivered during a single clinical encounter.
[b] Assumes clinical encounters are 60 minutes in duration; duration may vary based on clinical considerations.
[c] Defined by the PCIT protocol[1, 2].
[d] The *Eyberg Child Behavior Index* (ECBI)[3] administration, scoring, interpretation, and feedback is provided at each clinical encounter (treatment session).
[e] Extended PDI Coach sessions (61 minutes to 3 hours) may occur 2-3 times during a typical course of treatment.
[f] Typically addressed during post-treatment DPICS observation session; however, activities may also be conducted during a dedicated session.
[g] Conducted one to six months following completion of treatment.
[h] Includes consent and other agency-specific documentation and activities.
[i] Includes interval/periodic clinical assessment; does not include pre- and post-treatment clinical assessment.
[j] Critical to successful PCIT implementation and improved clinical outcomes; typically delivered by treating clinician. Highly variable across clients.
[k] Includes urgent or emergent in-session case coordination and communication. Highly variable across clients.

Table Three: PCIT Clinical Support Activities Estimates *(Out-of-Session Activities)*

Out-of-Session Activities [a] (Case-level)		Time per Activity		
		Typical Case (Hours)	Typical Range (Hours)	
			Minimum	Maximum
Case Support Activities (out-of-session)	Client intake [b]	0.5	0	1.0
	Clinical assessment + case conceptualization [c]	1.0	1.0	2.0
	Treatment planning [d]	0.5	0.5	1.0
	Session preparation [e]	4.3	2.0	6.5
	Session documentation + fidelity monitoring [f]	6.5	3.0	9.8
	Discharge planning [g]	0.5	0	1.0
	Case coordination/communication [h,i]	2.0	0	4.0
	Crisis management [i]	1.0	0	4.0
PCIT Fidelity Support Activities (out-of-session)	Clinical supervision/peer fidelity support/expert consultation [j]	2.2	1.0	3.3
General Support Activities [g] (out-of-session)	Non-clinical documentation	-	-	-
	Insurance + billing support	-	-	-
	Clinician travel	-	-	-
	Court preparation + testimony	-	-	-
Other Activities (out-of-session)	Other activities	-	-	-
TOTAL OUT-OF-SESSION ACTIVITIES		**18.5**	**7.5**	**32.6**

[a] Conducted out-of-session by a treating clinician; critical to successful PCIT implementation and improved clinical outcomes.

[b] Out-of-session intake activities include: referral review; caregiver engagement and scheduling; clinical screening; consent process; and other clinical activities and documentation.

[c] Out-of-session clinical assessment includes: scoring and interpretation of clinical assessment measures; collateral contact; record review; case conceptualization; and documentation of assessment process and findings.

[d] Out-of-session treatment planning includes: documentation of specific treatment goals and recommendations; and consideration of potential treatment barriers.

[e] Assumes ten (10) minutes per clinical encounter (treatment session); includes review of clinical notes, development of a written agenda, and preparation of clinical materials and activities.

[f] Assumes fifteen (15) minutes per clinical encounter (treatment session); includes any session-level documentation and fidelity-monitoring. Fidelity is monitored by a treating clinician, using a structured tool, at the clinical encounter level.

[g] Includes out-of-session development of recommendations for remaining treatment or service needs.

[h] Includes routine out-of-session: treatment/multidisciplinary team participation; collateral contact; service coordination and monitoring; provision of consultation to non-clinical professionals; and caregiver contact. Highly variable across clients.

[i] Includes urgent or emergent out-of-session case coordination and communication. Highly variable across clients.

[j] A treating clinician should participate in case-specific: a) clinical supervision provided by a trained supervisor; b) fidelity-driven peer case support; and/or (c) expert consultation. Frequency depends upon caseload size, case complexity, supervision structure, agency requirements, and other factors. Assumes five (5) minutes per clinical encounter (treatment session).

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Agency-level PCIT Program: Additional Resource Requirements

The following should be considered when determining the resource allocation necessary to develop and sustain an outpatient PCIT program:

Clinician Training and Certification

To become or remain nationally certified, a clinician must complete all training and certification/re-certification requirements, as outlined by the PCIT developer and PCIT International (www.pcit.org).

The cost associated with participation in a PCIT training program is variable and depends upon: curriculum content and format; costs incurred by trainer- and trainee-participants; and direct and indirect funding sources.

Post-Training Clinical Supervision

While maintaining an active caseload, PCIT clinicians should participate in case-specific: **a)** clinical supervision provided by a trained supervisor; and/or **b)** fidelity-driven peer case review. Additionally, clinicians should self-monitor fidelity across their caseload, using a structured fidelity metric, throughout treatment delivery.

When allocating resources to support supervision or peer case review, consider: caseload size and complexity; PCIT fidelity requirements; supervision structure; agency requirements; and other factors.

Clinical Assessment Measures

PCIT requires the administration of the *Eyberg Child Behavior Inventory* (ECBI) [3] to each caregiver, during each clinical encounter (treatment session). It is recommended that a client also be evaluated for trauma history and symptoms, neurodevelopmental status, internalizing symptoms, and other clinically-relevant concerns. Further, it is recommended that caregivers be evaluated for parenting stress, depression, and other relevant domains.

The cost associated with purchase or licensing of clinical assessment measures should be considered when allocating resources to support an agency-level PCIT program.

Space, Technology, and Materials

PCIT is typically delivered in a dedicated treatment room containing PCIT-appropriate interactive toys, basic furniture, and a designated clinical "time-out" space. PCIT clinicians conduct treatment from a separate observation room or designated observation position within the treatment room. When a separate observation room is used, communication is facilitated through a one-way mirror or a closed-circuit monitoring system.

The cost associated with space and technology requirements should be considered when allocating resources to launch an agency-level PCIT program.

Clinician Travel

A PCIT clinician may participate in activities that require travel, including: public PDI sessions, clinical support activities (out-of-session), and/or home-based treatment delivery.

When allocating resources to support an agency-level PCIT program, consideration should be given to the cost associated with clinician travel time, as well as direct travel expenses.

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North Carolina Child Treatment Program
Evidence-Based Treatment (EBT) Service Delivery Time Model Series

Clinical Service Delivery Time Model for Parent-Child Interaction Therapy (PCIT)

Model Overview, Research Base, and Outcomes

Section One: PCIT Overview

Model Developer

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Treatment Protocols

- Eyberg, S. M., & Funderburk, B. W. (2011, rev 6/16). *Parent-Child Interaction Therapy Protocol.* Gainesville, Florida: PCIT International, Inc.[1]
- Eyberg, S. M., Chase, R. M., Fernandez, M. A., & Nelson, M. M. (2014). *Dyadic Parent-Child Interaction Coding System (DPICS) Clinical Manual (4th Edition)*. PCIT International, Inc.[2]

Model Description

PCIT is an evidence-based, mental health treatment for children who are experiencing behavioral and/or emotional difficulties, unhealthy attachment, or dysfunctional caregiver-child interactions. PCIT supports the development of both child emotional self-regulation and authoritative parenting skills and, thus, positive behaviors and healthy caregiver-child interaction. PCIT is a strengths-based, assessment-driven, manualized intervention that is delivered through weekly client-caregiver sessions.

Treatment Theory

PCIT is based on attachment, behavioral modification, coercive cycle, family systems, and social learning theories.

Target Population

PCIT is indicated for children from 2 to 7 years of age who are demonstrating externalizing behaviors, attachment difficulties, or dysfunctional caregiver-child interaction. Treatment delivery may be tailored based on the developmental age, rather than chronological age, of a client with intellectual and/or developmental disabilities.

Targeted Clinical Outcomes

PCIT outcomes include: increase in adaptive child behaviors and compliance; decrease in disruptive child behaviors; increase in authoritative parenting skills; decrease in negative parenting behaviors; and decrease in parental stress.

Treatment Participants

PCIT delivery typically includes a child (client) and at least one primary caregiver. The child-caregiver dyad attends all treatment sessions together, with the exception of at least two caregiver-only sessions conducted during the course of treatment.

Treatment Delivery Professionals

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PCIT is delivered by a licensed mental health clinician who is actively engaged in training with an endorsed trainer or has successfully completed all clinical training requirements, as defined by the model developer and by PCIT International (www.pcit.org).

Service Setting and Type

PCIT is typically delivered in an outpatient clinical setting, with several sessions conducted in a public (non-clinical) setting; in select clinical circumstances, treatment may be offered in a home setting.

PCIT may be offered through a variety of service delivery models, including: outpatient services, enhanced outpatient services, intensive in-home services, and other service delivery models.

Treatment Delivery and Intensity

- PCIT includes eleven (11) mandatory clinical encounters (treatment sessions), although the majority of community-based clients exceed eleven clinical encounters. Families typically progress through treatment as caregivers demonstrate PCIT skills mastery, and as clients demonstrate a reduction in targeted behaviors.
- The majority of clinical encounters include a client and primary caregiver; at least two caregiver-only sessions are conducted during a typical course of PCIT.
- Clinical encounters are conducted on a weekly basis over several months; less frequent sessions may adversely impact the achievement of targeted clinical goals. In select circumstances, a client may participate in two clinical encounters during a single week.
- A clinical encounter is typically 60 minutes in duration; however, PDI Coach sessions may extend beyond 60 minutes, up to three (3) times during the course of treatment.
- A typical course of community-based PCIT includes an estimated: **a)** 26 hours; and **b)** 42 minutes of clinical support activity time (out-of-session) for every 60-minute encounter. Client and caregiver in-session participation time is approximately equal over the course of treatment.
- In select circumstances, two primary caregivers may wish to participate in PCIT, but are unable or unwilling to participate together; this may necessitate the initiation of two separate courses of treatment.
- Case-level service utilization (clinical encounter number and time, as well as out-of-session clinical support time) may fall outside the "typical" range, yet remain clinically acceptable, due to case complexity and implementation-related factors.

Clinical Supervision

While maintaining an active caseload, PCIT clinicians should participate in case-specific clinical supervision provided by a trained supervisor or fidelity-driven peer case review. Additionally, clinicians should self-monitor fidelity across their caseload, using a structured fidelity metric, throughout treatment delivery.

Factors Impacting Treatment Delivery and Outcomes

Treatment content and intensity, clinician fidelity, and clinical outcomes vary across a PCIT caseload due to child-, caregiver-, family-, clinician-, agency-, and systems-level barriers and supports.

Section Two: PCIT Clinical Inclusion and Exclusion Criteria

	Inclusion Criteria	**Exclusion Criteria**
Child (client)	○ 2 to 7 years of age [a] ○ Clinical indication: ▪ Externalizing symptoms ▪ Internalizing concerns, including mood disorders ▪ Relationship and/or attachment difficulty with primary caregiver ○ Receptive language skills ≥ 24 months of age ○ Available to participate in regularly scheduled treatment sessions [b] ○ Regular contact between client and participating primary caregiver [c]	○ Receptive language skills significantly < 24 months of age ○ Unable to participate in regularly scheduled treatment sessions [b] ○ Limited contact between client and participating primary caregiver [c]
Primary Caregiver	○ Available to participate in regularly scheduled treatment sessions [b] ○ Regular contact between client and participating primary caregiver [c]	○ Perpetrator of sexual abuse ○ Active perpetrator of domestic violence, physical abuse, or psychological abuse ○ Actively psychotic, significantly thought-disordered, or significantly cognitively-impaired (IQ < 65) ○ Unable to participate in regularly scheduled treatment sessions [b] ○ Limited contact between client and participating primary caregiver [c]

[a] PCIT may be delivered at the developmental, rather than chronological age, of a client with intellectual and/or developmental disabilities.

[b] Clinical encounters (treatment sessions) are typically conducted on a weekly basis; less frequent sessions may adversely impact the achievement of clinical goals.

[c] Clients and caregivers must engage in PCIT skills practice on a consistent basis, minimally including three, 30-minute face-to-face contacts per week (outside of PCIT clinical session time).

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Section Three: PCIT Clinical Assessment Strategy

Case-level PCIT clinical assessment should be individualized and include: administration, scoring, and interpretation of standardized clinical assessment measures; clinical interview and observation; collateral contact; record review; case conceptualization; documentation of the assessment process, findings, and conclusions; and the provision of feedback.

PCIT minimally requires the administration of the *Eyberg Child Behavior Inventory* (ECBI) [3] to each caregiver, during each clinical encounter, to monitor client behavior. The Dyadic Parent-Child Interaction Coding System (DPICS) [2] is also administered throughout treatment to assess parent-child interaction.

Per best practices standards, it is recommended that each client be assessed for trauma history and symptoms, neurodevelopmental status, internalizing symptoms, and other concerns. Further, it is recommended that each caregiver be evaluated for parenting stress, depression, and other clinically-relevant concerns.

PCIT Clinical Assessment Measure Domains
(Per Treatment Phase)

		Pre-Treatment Phase	**Treatment Phase**	**Post-Treatment Phase and Booster Session**
Assess Client	Required	○ Externalizing symptoms per *Eyberg Child Behavior Inventory* (ECBI)	○ Externalizing symptoms per *Eyberg Child Behavior Inventory* (ECBI)	○ Externalizing symptoms per *Eyberg Child Behavior Inventory* (ECBI)
	Recommended	○ Trauma history ○ Posttraumatic stress symptoms ○ Internalizing symptoms ○ Additional externalizing symptoms ○ Neurodevelopmental status ○ Other domains, as indicated	○ As clinically indicated	○ Trauma history ○ Posttraumatic stress symptoms ○ Internalizing symptoms ○ Additional externalizing symptoms ○ Neurodevelopmental status ○ Other domains, as indicated
Assess Caregiver	Required	○ Parent-child interaction per *Dyadic Parent-Child Interaction Coding System* (DPICS)	○ Parent-child interaction per *Dyadic Parent-Child Interaction Coding System* (DPICS)	○ Parent-child interaction per *Dyadic Parent-Child Interaction Coding System* (DPICS)
	Recommended	○ Parenting stress ○ Caregiver anxiety and depression ○ Caregiver trauma history ○ Caregiver posttraumatic symptoms ○ Other domains, as indicated	○ As clinically indicated	○ Parenting stress ○ Caregiver anxiety and depression ○ Caregiver trauma history ○ Caregiver posttraumatic symptoms ○ Other domains, as indicated

Section Four: NC CTP PCIT Service Delivery Checklist

The *NC CTP Clinical Service Delivery Checklist (PCIT)* was developed to support the collection, aggregation, and analysis of service utilization data within an outpatient PCIT program. The *Checklist* describes core clinical and fidelity requirements for the delivery of PCIT, per standards established through the PCIT manual[1, 2]. *Checklist* adaptation may be required to support service utilization analysis within other service delivery models or treatment environments.

PCIT service utilization data should be interpreted with caution, under the guidance of a PCIT clinical expert, when applied to: clinical network development and contracting, establishment of service delivery payment rates, utilization management, and clinical performance monitoring.

The *Checklist* should not be used to facilitate training, treatment, fidelity monitoring, or clinical supervision. Rather, the PCIT protocol [1, 2] and/or clinical fidelity monitoring tools should be used for this purpose.

PCIT Treatment Phase	Session	Activities	Requirement
Pre-Treatment Assessment	Pre-Treatment DPICS Assessment	1. Conduct clinical interviews and observation 2. Administer and score ECBI 3. Administer DPICS, including Child-Led Play, Parent-Led Play, and Clean-up situations 4. Administer additional, standardized clinical assessment measures, as indicated 5. Contact collaterals and review records 6. Document assessment process, findings, conclusions, and treatment plan 7. Provide feedback to caregiver 8. Conduct out-of-session case support activities, as clinically indicated 9. Self-assess and document fidelity	1 session (minimum) Administer ECBI and DPICS
Child-Directed Interaction (CDI)	CDI Teach	1. Administer and score ECBI 2. Teach CDI skills 3. Document treatment strategies and caregiver progress 4. Conduct out-of-session case support activities, as clinically indicated 5. Self-assess and document fidelity	1 session (minimum) Caregiver(s) only
	CDI Coach	1. Administer and score ECBI 2. Review previously assigned CDI homework 3. Review caregiver PCIT skills 4. Code PCIT skills and provide feedback to caregiver 5. Coach PCIT skills 6. Provide additional feedback to caregiver 7. Assign CDI homework 8. Review relationship between the ECBI scores, caregiver skills, and homework completion 9. Document treatment strategies and client-caregiver progress 10. Conduct out-of-session case support activities, as clinically indicated 11. Self-assess and document fidelity	3 sessions (minimum) Conducted weekly

PCIT Service Delivery Checklist - continued

PCIT Service Delivery Checklist - continued

PCIT Treatment Phase	Session	Activities	Requirement
Parent-Directed Interaction (PDI)	PDI Teach	1. Administer and score ECBI 2. Teach PDI skills 3. Document treatment strategies and caregiver progress 4. Conduct out-of-session case support activities, as clinically indicated 5. Self-assess and document fidelity	1 session (minimum) Caregiver(s) only
	PDI Coach	1. Administer and score ECBI 2. Review previously assigned CDI and PDI homework 3. Review caregiver CDI and PDI skills 4. Code CDI and/or PDI skills and provide feedback to caregiver 5. Coach CDI and PDI skills 6. Provide additional feedback to caregiver 7. Assign CDI and PDI homework 8. Review relationship between the ECBI scores, caregiver skills, and homework completion 9. +/- Conduct a sibling session 10. Document treatment strategies and client-caregiver progress 11. Conduct out-of-session case support activities, as clinically indicated 12. Self-assess and document fidelity	4 sessions (minimum) Conducted weekly
	Post-Treatment DPICS Assessment	1. Administer and score ECBI 2. Administer DPICS, including Child-Led Play, Parent-Led Play, and Clean-up situations 3. Administer additional, standardized clinical assessment measures, as indicated 4. Document assessment process, findings, conclusions, and post-PCIT plan 5. Provide feedback to caregiver 6. Conduct out-of-session case support activities, as clinically indicated 7. Self-assess and document fidelity	1 session (minimum)
	+/- Graduation	1. Conduct graduation session activities 2. Document treatment strategies and client-caregiver progress 3. Conduct out-of-session case support activities, as clinically indicated 4. Self-assess and document fidelity	+/- 1 session Conducted if not completed during post-treatment DPICS session
Post-Treatment	Booster	1. Administer and score ECBI 2. Review post-treatment use of CDI and PDI skills 3. Code CDI and PDI skills, providing feedback to caregiver 4. Coach CDI and PDI skills, as indicated 5. Provide additional feedback to caregiver 6. Provide clinical recommendations to ensure maintenance of caregiver PCIT skills and client progress 7. Refer for additional PCIT sessions, if indicated 8. Document treatment strategies and client-caregiver skill maintenance 9. Conduct out-of-session case support activities, as clinically indicated 10. Self-assess and document fidelity	+/- 1 session Conducted 1-6 months post-treatment

Section Five: PCIT Research Base

NC CTP faculty conducts an annual literature review of the Parent-Child Interaction Therapy (PCIT) research base, with a particular emphasis on populations studied and treatment outcomes for the PCIT model and/or model adaptations. A paper is eligible for inclusion if, minimally, the study: 1) is published in a peer-reviewed journal, 2) incorporates a pre-post evaluation design that includes at least one group of children and families, and 3) represents an original randomized efficacy trial (RCT), quasi-experimental study, single-group pretest-posttest design study, pilot study, systematic review, or meta-analysis. Model adaptation studies are confined to the *Populations Studied* and *Outcomes with Adaptations and Non-Traditional Modalities* subsections of the PCIT Research Base section if the PCIT model design was significantly altered through adaptation. Studies are excluded entirely from the PCIT Research Base section if they do not meet all three inclusion criteria, with the exception of selected cross-sectional and/or qualitative findings deemed relevant for inclusion in the *Systems Outcomes* table. A specific outcome is included in this review if a statistically- and/or clinically-significant main effect was found over time for that outcome.

Detailed information about study rationale, methodology, and other content may be accessed directly via the cited research article.

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Populations Studied

- 2-9 years of age with behavioral concerns[4-66]
- 12-15 months of age with behavioral concerns[67-70]
- 12-24 months of age with behavioral concerns[71-73]
- At-risk for child abuse and/or neglect[74-79]
- Exposed to child abuse and/or neglect[75, 77-84]
- Exposed to different and/or multiple traumatic events[85, 86]
- Exposed to domestic violence[87-90]
- Living in foster care[91-95]
- With major depressive disorder or depressive symptoms[96-101]
- With comorbid anxiety disorders[102]
- With primary anxiety [103-105]
- With comorbid callous-unemotional traits[106]
- With comorbid problematic sexual behaviors[107]
- With comorbid developmental disabilities[108, 109]
- With primary language delays[110, 111]
- With language impairment[112]
- With symptoms of autism or developmental delay[113]
- With autism spectrum disorders[114-120]
- With prenatal substance exposure[121, 122]
- With selective mutism[123, 124]
- Born prematurely[125]

- Diverse racial and ethnic populations living in the United States, including: African or African American[55], Mexican American[56, 57], Puerto Rican[43, 62], and American Indian or Alaskan Native, Asian, Caucasian, Latinx, multiracial, and/or other groups[7, 8, 10, 12-19, 21-24, 27-29, 31-34, 36-40, 42, 44, 45, 47, 48, 50-54, 60-65, 67-70, 74, 76-82, 84-89, 91-100, 102-105, 107-109, 111, 112, 114-122, 125]
- Children living in countries outside of the United States, including: Australia[9, 11, 26, 41, 46, 49, 71-73, 75, 83, 106, 113], Canada[123], China[20, 35, 58], Germany[96] , Netherlands[4, 5, 30] , Norway[6], and United Kingdom[59, 110]

Treatment Outcomes:

Client Outcomes	
Immediate Post-Treatment Outcome	**Outcome Sustained Following Treatment**
Improvement in child compliance to caregiver commands.[5, 9, 10, 31, 52-54, 63, 83, 106, 108, 111, 125]	At 6 weeks[52] At 3 months[106] At 4 months[10] At 6 months[9] At 1 year[46] At 2 years[8]
Decrease in disruptive/externalizing symptoms[4-6, 8-13, 17, 19-22, 25-32, 35, 37-39, 41, 43, 44, 46-51, 54, 56, 59-61, 63, 75-77, 80, 83, 85, 86, 88, 89, 91, 92, 102, 103, 106-108, 111, 113, 115-119, 121, 122, 125]	At 1 month[83] At 2 months[59] At 6 weeks[52] At 3 months[20, 35, 43, 58] At 4 months[10, 48, 125] At 6 months[9, 21, 49] At 6-24 months[56] At 10-30 months[47] At 1 year[7, 8, 46] At 18 months[6, 7] From 3-6 years[12]
Decrease in trauma symptoms[85]	--
Decrease in primary anxiety symptoms[103-105]	--
Decrease in depressive symptoms[35]	--
Decrease in comorbid anxiety symptoms[35, 85, 102]	--
Decrease in somatic symptoms[85]	
Decrease in aggression[53, 85, 125]	--
Decrease in comorbid internalizing symptoms[5, 20-22, 26, 28, 38, 41, 50, 52, 58, 61, 75, 77, 83, 85, 89, 90, 93, 102, 115, 125]	At 6 weeks[52] At 3 months[20, 35, 58] At 6 months[5, 21]
Decrease in emotional reactivity[85]	--
Decrease in sleep problems[85, 109]	--
Decrease in problematic sexual behaviors[107]	--
Decrease in delinquency[54, 85]	--
Decrease in thought problems[85]	--
Decrease in fear and avoidance[103]	--
Decrease in attention problems[8, 20, 35, 52, 58, 85, 115, 125]	At 6 weeks[52] At 3 months[35, 52, 58] At 10-30 months[47] At 1 year[8] At 2 years[8]

Client Outcomes (continued…)	
Immediate Post-Treatment Outcome	**Outcome Sustained Following Treatment**
Decrease in hyperactivity [8, 49, 52, 114]	At 6 weeks[52] At 3 months[43] At 6 months[49] At 10-30 months[47] At 1 year[8] At 18 months At 2 years[8]
Improvement in global functioning[60]	--
Improvement in self-esteem[52]	At 6 weeks[52]
Improvement in social competency[114, 115, 119]	At 6 weeks[116] At 3 months[121] At 12 months[121]
Improvement in social responsiveness[119]	--
Improvement in social motivation[117]	--
Improvement in social awareness[116, 119]	At 6 weeks[116]
Decrease in repetitive and restricted behavior[119]	--
Improvement in communication[110, 112, 117, 118]	--
Improvement in social motivation[117]	--
Improvement in callous-unemotional traits[106]	At 3 months[106]
Improvement in empathy[106]	--
Improvement in emotion regulation[27]	--
Improvement in child emotional availability[61]	--
Decrease in atypical behavior[114, 115, 118]	--
Improvement in child adaptability/adaptive behaviors[21, 114, 118, 119]	At 6 months[21]
Improvement in flexible temperament[49]	At 6 months[49]
Decrease in withdrawal[85, 118]	--
Improvement in executive functioning skills[119]	--

Primary Caregiver Outcomes	
Immediate Post-Treatment Outcome	**Outcome Sustained Following Treatment**
Decrease in caregiver burden associated with child disruptive/externalizing behavior[5, 8-10, 12, 13, 19, 20, 22, 25, 30, 35, 37-39, 41, 49-54, 56, 58-61, 63-65, 75-77, 83, 85, 86, 88, 89, 93, 106, 107, 111, 114, 116, 117, 121, 122, 125]	At 6 weeks[52, 116] At 2 months At 3 months[20, 35, 58] At 4 months[10] At 3-6 months At 6 months[5, 9, 49] At 6-24 months[56, 57] At 10-30 months[47] At 1 year[7, 8] At 18 months [7] At 2 years[8] At 3-6 years[12]
Improvement in positive parenting skills[5, 6, 9, 10, 19-22, 26-28, 33, 35, 38, 39, 53, 54, 56, 58, 61, 64, 65, 68, 75, 81, 83, 85, 86, 95, 108, 110, 111, 116, 117, 119, 122, 125]	At 1 month[83] At 6 weeks[116] At 2 months[59] At 3 months[20, 35, 58, 68] At 4 months[10, 108] At 6 months[5, 6, 9, 21] At 6-24 months[56] At 1 year[46] At 18 months[6] At 2 years[8]
Decrease in negative parenting behaviors[5, 6, 8, 19-22, 26, 38, 39, 44, 53, 54, 75, 80-83, 85, 87, 95, 105, 119, 120, 122, 125]	At 1 month[83] At 6 weeks[52] At 3 months[20, 35, 58] At 4 months[10, 108] At 6 months[6, 21] At 6-24 months[56] At 1 year[8] At 18 months[6] At 2 years[8]
Decrease in inconsistent discipline[88]	--
Decrease in overreactive discipline techniques[9]	At 6 months[9] At 1 year[46]
Decrease in use of corporal punishment[20, 35, 58]	At 3 months[20, 35, 58]
Decrease in overall psychological symptoms[60, 77, 88]	--
Decrease in anxiety symptoms[41, 54, 58]	At 3 months[58]
Decrease in depression symptoms[12, 41, 48, 58, 61, 80, 113]	At 3 months[35, 58] At 4 months[48]
Decrease in parenting stress[5, 9, 10, 20-22, 28, 35, 38, 39, 41, 44, 48, 58-60, 75, 77, 83-85, 89, 95, 108, 118, 119, 121]	At 1 month[83] At 6 weeks [52, 89] At 3 months[20, 35, 58] At 4 months[10, 48] At 6 months[5, 9, 21] At 6-24 months[56, 57] At 10-30 months[47] At 1 year[8, 46] At 2 years[8]

Primary Caregiver Outcomes (continued…)	
Immediate Post-Treatment Outcome	**Outcome Sustained Following Treatment**
Improvement in caregiver attitude towards child[54]	--
Improvement in social interest and involvement[54]	--
Improvement in perceived social support[21]	At 6 months[21]
Improvement in responsive caregiving behaviors (warmth/positive affect, sensitivity/responsiveness, and/or physical closeness) [52, 68, 75, 83, 114]	At 1 month[83] At 6 weeks[52]
Improvement in child-caregiver shared positive affect[114]	--
Improvement in positive emotion socialization strategies[27]	--
Decrease in negative emotion socialization strategies[27]	--
Improvement in caregiver locus of control[9, 10, 12, 54, 88]	From 3-to-6 years[12] At 4 months[10] At 6 months[9] At 10-30 months[47] At 3-6 years[12]
Improvement in parenting competence[9]	At 6 months[9]
Decrease in child abuse potential[77, 80, 83, 93]	--
Decrease in dysfunctional caregiver-child interactions[65, 118]	--
Improvement in emotion regulation[26]	--

Untreated Sibling Outcomes
Decrease in behavior problems among untreated siblings[51, 54]
Decrease in perceived severity of behaviors among untreated siblings[51]
Improvement in untreated sibling compliance to caregiver commands[54, 66]

Systems Outcomes	
Cost-Effectiveness	Cost effective for child disruptive behavior disorders when considering cost per client and significant benefits (improvements in disruptive behavior and strong maintenance data)[66]
Child welfare	Decrease in child welfare recidivism[80, 81, 83, 84]

Systems Outcomes (continued…)	
Education	Decrease in child disruptive/externalizing behavior at school[5, 13] ➢ Sustained at 6-month follow-up[5] ➢ Sustained at 12-month follow-up[7] Decrease in teacher burden associated with child disruptive/externalizing behavior at school[5, 13] ➢ Sustained at 6-month follow-up[5] ➢ Sustained at 12-month follow-up[7] Decrease in child hyperactivity at school[13] ➢ Sustained at 12-month follow-up[7] Improvement in child compliance at school[13] ➢ Sustained at 12-month follow-up[7] ➢ Sustained at 18-month follow-up[7] Improvement in child social competency at school[13] ➢ Sustained at 12-month follow-up[7]

Outcomes with Adaptations and Non-Traditional Modalities	
Treatment Modality / Adaptation	**Outcome**
Enhanced PCIT (EPCIT): *Self-motivational orientation combined with PCIT*	Decrease in child disruptive/externalizing symptoms[80] Decrease in child internalizing symptoms[80] Improvement in positive parenting skills[81] Decrease in negative parenting behaviors[80, 81] Decrease in child abuse potential[80] Decrease in child welfare recidivism[80, 81]
Internet-delivered PCIT (I-PCIT)	Decrease in child disruptive/externalizing behavior[14] Decrease in caregiver burden associated with child disruptive/externalizing behavior[13, 14] Decrease in caregiver-perceived barriers to treatment, compared to clinic-based PCIT[14]
Ebook PCIT	Decrease in child disruptive/externalizing behavior[24] ➢ Sustained at 3-month follow-up[24] Improvement in positive parenting skills[24] Sustained at 3-month follow-up[24]
Intensive PCIT (I-PCIT): *Adaptation with increased intensity (5 days) for 2-weeks*	Decrease in child disruptive/externalizing behavior[14, 23] ➢ Sustained at 6-9 month follow-up[14, 23] Improvement in child compliance to caregiver commands[23] ➢ Sustained at 6-9 month follow-up[23] Improvement in positive parenting skills[23, 36] ➢ Sustained at 4-month follow-up[36] ➢ Sustained at 6-9 month follow-up[23] Improvement in effective discipline strategies[23, 36] ➢ Sustained at 4-month follow-up[36] ➢ Sustained at 6-9 month follow-up[36] Decrease in parenting stress[36] ➢ Sustained at 6-9 month follow-up[36]

Outcomes with Adaptations and Non-Traditional Modalities (continued…)	
Treatment Modality / Adaptation	**Outcome**
PCIT for Puerto Rican children	Decrease in child disruptive/externalizing symptoms[43, 62] ➢ Sustained at 3-month follow-up[43] ➢ Sustained at 3.5-month follow-up[62] Decrease in child aggression[43, 62] ➢ Sustained at 3-month follow-up[43] ➢ Sustained at 3.5-month follow-up[62] Decrease in child hyperactivity[43, 62] ➢ Sustained at 3-month follow-up[43] ➢ Sustained at 3.5-month follow-up[62] Decrease in child inattention[43, 62] ➢ Sustained at 3.5-month follow-up[62] Decrease in caregiver burden associated with child disruptive/externalizing symptoms[43, 62] ➢ Sustained at 3-month follow-up[43] ➢ Sustained at 3.5-month follow-up[62] Improvement in positive parenting skills[43, 62] ➢ Sustained at 3-month follow-up[43] ➢ Sustained at 3.5-month follow-up[62] Decrease in negative parenting behaviors[43, 62] ➢ Sustained at 3-month follow-up[43] ➢ Sustained at 3.5-month follow-up[62] Decrease in parenting stress[43, 62] ➢ Sustained at 3-month follow-up[43] ➢ Sustained at 3.5-month follow-up[62]
Guiando a Ninos Activos (GANA): *Culturally modified version of PCIT for Mexican Americans*	Decrease in child disruptive/externalizing symptoms[56] ➢ Sustained at 6-24 month follow-up[56, 57] Decrease in caregiver burden associated with child disruptive/externalizing symptoms[56] ➢ Sustained at 6-24 month follow-up[56, 57] Improvement in positive parenting skills[56] ➢ Sustained at 6-24 month follow-up[56, 57] Decrease in negative parenting behaviors[56] ➢ Sustained at 6-24 month follow-up[56, 57] Decrease in parenting stress[56] ➢ Sustained at 6-24 month follow-up[56, 57]

Outcomes with Adaptations and Non-Traditional Modalities (continued…)	
Treatment Modality / Adaptation	**Outcome**
Primary Care PCIT (PC-PCIT): *Brief group adaptation for pediatric care settings*	Decrease in child disruptive/externalizing symptoms[40] ➢ Sustained at 6-month follow-up[40] Decrease in negative parenting behaviors[40] ➢ Sustained at 6-month follow-up[40] Improvement in caregiver locus of control[9, 40, 54] ➢ Sustained at 6-month follow-up[40]
PCIT Anticipatory Guidance (PCIT-AG): *Written materials with basic steps and guidelines for PCIT*	Decrease in child disruptive/externalizing symptoms[40] ➢ Sustained at 6-month follow-up[40] Decrease in negative parenting behaviors[40] ➢ Sustained at 6-month follow-up[40] Improvement in caregiver locus of control[9, 40, 54] ➢ Sustained at 6-month follow-up[40]

Outcomes with Adaptations and Non-Traditional Modalities (continued…)	
Treatment Modality / Adaptation	**Outcome**
Abbreviated PCIT (ABB): *Brief adaptation of PCIT using instructional videotapes and phone consultation*	Improvement in child compliance to caregiver commands[9] ➢ Sustained at 6-month follow up[9] Decrease in child disruptive/externalizing symptoms[9] ➢ Sustained at 6-month follow up[9] ➢ Sustained at 1-year follow up[46] ➢ Sustained at 2-year follow up[46] Decrease in caregiver burden associated with child disruptive/externalizing symptoms[9] ➢ Sustained at 6-month follow up[9] Improvement in positive parenting skills[9] ➢ Sustained at 6-month follow up[9] ➢ Sustained at 1-year follow up[46] Decrease in negative parenting behaviors[9] ➢ Sustained at 6-month follow up[9] ➢ Sustained at 1-year follow up[46] Decrease in overreactive discipline techniques[9] ➢ Sustained at 6-month follow up[9] ➢ Sustained at 1-year follow up[46] Decrease in parenting stress[9] ➢ Sustained at 6-month follow up[9] ➢ Sustained at 1-year follow up[46] Improvement in parenting competence[9] ➢ Sustained at 6-month follow up[9] Improvement in caregiver locus of control[9] ➢ Sustained at 6-month follow up[9]

Outcomes with Adaptations and Non-Traditional Modalities (continued…)	
Treatment Modality / Adaptation	**Outcome**
PCIT-Emotion Development (PCIT-ED)	Decrease in child sleep problems[96] ➢ Sustained at 3-month follow up[96] Decrease in child depressive symptoms[98, 99] ➢ Sustained at 18-month follow up[101] Decrease in child internalizing symptoms[99] Decrease in child disruptive/externalizing symptoms[99] Decrease in child comorbid disorders (major depression, anxiety disorders, oppositional defiant disorder)[98] ➢ Sustained at 18-month follow up[101] Decrease in child emotional lability[98] ➢ Sustained at 18-month follow up[98, 101] Improvement in child emotion regulation[98, 99] ➢ Sustained at 18-month follow up[101] Improvement in child emotion recognition[99] Improvement in child guilt reparation[98, 101] ➢ Sustained at 18-month follow up[101] Improvement in child global functioning[98, 99, 101] Improvement in child executive functioning[99] Improvement in caregiver emotion coaching and/or other positive parenting skills[97, 98] ➢ Sustained at 18-month follow up[101] Decrease in duration of caregiver negative affect[97] Decrease in negative parenting behaviors[97] ➢ Sustained at 18-month follow up[101] Decrease in parenting stress[98, 99] ➢ Sustained at 18-month follow up[101] Improvement in duration of caregiver positive affect[97] Improvement in caregiver depressive symptoms[98, 99] ➢ Sustained at 18-month follow up[101] Improvement in positive caregiver-child interactional style (e.g., overall warmth)[97]

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Outcomes with Adaptations and Non-Traditional Modalities (continued…)	
Treatment Modality / Adaptation	**Outcome**
PCIT-Toddlers (PCIT-T)	Decrease in child disruptive/externalizing behavior[71-73] ➢ Sustained at 4-month follow-up[71] Improvement in positive parenting skills[71-73] ➢ Sustained at 4-month follow-up[71] Decrease in negative parenting behaviors[72, 73] Improvement in emotional availability of parents[71] ➢ Sustained at 4-month follow-up[71] Decrease in caregiver burden associated with child disruptive/externalizing behavior [72, 73] Improvement in parenting stress[71] ➢ Sustained at 4-month follow-up[71] Decrease in caregiver depression symptoms[73]
PCIT-TOTS: *Brief adaptation of PCIT for 2-5 year olds*	Decrease in child disruptive/externalizing behavior[42] ➢ Sustained at 5-6 year follow-up[42] Decrease in caregiver burden associated with child disruptive/externalizing behavior[42] Decrease in parenting stress[42]

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Outcomes with Adaptations and Non-Traditional Modalities (continued…)	
Treatment Modality / Adaptation	**Outcome**
Infant Behavior Program (IBP): *Brief home-based adaptation of standard PCIT for 12-15 month olds*	Decrease in child disruptive/externalizing behavior[67, 69] ➢ Sustained at 3-month follow-up[67] Decrease in frequency of child aggressive behavior[70] ➢ Sustained at 3-month follow-up[70] Improvement in child compliance to caregiver commands compared to standard pediatric primary care at 6-month follow-up[67] Lower child comorbid internalizing symptoms compared to standard pediatric primary care at 6-month follow-up[67] Improvement in different/diverse types of and total utterances from child[69] ➢ Sustained at 3- and 6-month follow-up[69] Improvement in positive parenting skills[67, 68] ➢ Sustained at 3- and 6-month follow-up[67, 68] Decrease in negative parenting behaviors[67, 68, 70] ➢ Sustained at 3-month follow-up[67, 68] ➢ Sustained at 6-month follow-up[67] Improvement in responsive caregiving behaviors (warmth/positive affect and/or sensitivity/responsiveness)[68] ➢ Sustained at 3- and 6-month follow-up[68] Decrease in parental intrusiveness/over control[68] ➢ Sustained at 3- and 6-month follow-up[68]
PCIT-Callous Unemotional version (PCIT-CU)	Decrease in child disruptive/externalizing behavior[106] ➢ Sustained at 3-month follow-up[106] Decrease in child aggressive behavior[106] ➢ Sustained at 3-month follow-up[106] Improvement in caregiver cognitive and affective empathy[106] ➢ Sustained at 3-month follow-up[106] Decrease in child callous-unemotional traits[106] ➢ Sustained at 3-month follow-up[106]
The CALM Program (CALM): *Anxiety-based modification of PCIT*	Decrease in primary anxiety symptoms[104] Improvement in global functioning[104]

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Outcomes with Adaptations and Non-Traditional Modalities (continued…)	
Treatment Modality / Adaptation	**Outcome**
PCIT for Separation Anxiety Disorder (SAD)	Decrease in separation anxiety[103, 105] ➢ Sustained at 3-6 month follow-up[103] Decrease in disruptive/externalizing symptoms[103] ➢ Sustained at 3-6 month follow-up[103] Decrease in internalizing symptoms[103] ➢ Sustained at 3-6 month follow-up[103] Decrease in caregiver burden associated with child disruptive/externalizing symptoms[103] ➢ Sustained at 3-6 month follow-up[103]
PCIT for Selective Mutism (PCIT-SM)	Decrease in selective mutism symptoms[123] ➢ Sustained at 3-month follow-up[123] ➢ Sustained at 1-year follow-up[123] Decrease in comorbid anxiety scores[123] ➢ Sustained at 3-month follow-up[123] ➢ Sustained at 1-year follow-up[123] Improvement in communication[123] ➢ Sustained at 3-month follow-up[123] ➢ Sustained at 1-year follow-up[123]
Intensive group behavioral treatment (IGBT) for children with Selective Mutism: *Intensive, group adaptation of PCIT*	Decrease in child selective mutism symptoms[124] ➢ Sustained at 4-week follow-up[124] ➢ Sustained at 8 weeks into the school year[124] Decrease in child social anxiety symptoms[124] ➢ Sustained at 4-week follow-up[124] ➢ Sustained at 8 weeks into the school year[124] Decrease in child overall anxiety symptoms[124] ➢ Sustained at 4-week follow-up[124] ➢ Sustained at 8 weeks into the school year[124] Improvement in child global functioning[124] ➢ Sustained at 4-week follow-up[124] ➢ Sustained at 8 weeks into the school year[124] Improvement in child verbal behavior in home, school, and social settings[124] ➢ Sustained at 4-week follow-up[124] ➢ Sustained at 8 weeks into the school year[124]

Outcomes with Adaptations and Non-Traditional Modalities (continued…)	
Treatment Modality / Adaptation	**Outcome**
Group PCIT for children with autism spectrum disorder (ASD)	Improvement in positive parenting skills[120] ➢ Sustained at 6-month follow-up[120] Decrease in negative parenting behaviors[120] ➢ Sustained at 6-month follow-up[120] Decrease in parenting stress[120] ➢ Sustained at 6-month follow-up[120]
Group PCIT	Decrease in child disruptive/externalizing behavior[21, 78] ➢ Sustained at 6-month follow-up[21] Decrease in child internalizing symptoms[21, 78] ➢ Sustained at 6-month follow-up[21] Improvement in child adaptive behaviors[21] ➢ Sustained at 6-month follow-up[21] Improvement in positive parenting skills[21, 78] ➢ Sustained at 6-month follow-up[21] Decrease in negative parenting behaviors[21] ➢ Sustained at 6-month follow-up[21] Decrease in parenting stress[21, 79] ➢ Sustained at 6-month follow-up[21] Decrease in child abuse potential[21, 79] Improvement in caregiver perceived social support[21] ➢ Sustained at 6-month follow-up[21]
Summer Treatment Program for Pre-Kindergarteners (STP-PreK): *Brief group adaptation of PCIT included in parenting component*	Improvement in child compliance to caregiver commands[33] ➢ Sustained at 6-9 month follow-up[33] Improvement in positive parenting skills[33] ➢ Sustained at 6-9 month follow-up[33] Decrease in negative parenting behaviors[33] ➢ Sustained at 6-9 month follow-up[33] Decrease in parenting stress[33] ➢ Sustained at 6-9 month follow-up[33]

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Outcomes with Adaptations and Non-Traditional Modalities (continued…)	
Treatment Modality / Adaptation	**Outcome**
Training Teachers in PCIT	Decrease in child disruptive/externalizing behavior[45] Decrease in time-outs[45] Decrease in teacher criticism of students[45] Improvement in teacher labelled praise of students[45] Improvement in teacher report of classroom manageability[45]
Domestic Violence Shelter Parent Training Program: *Dyadic and group adaptation incorporating Child Directed Interaction from PCIT*	Improvement in positive parenting skills[87] Decrease in negative parenting behaviors[87]
Project Connect: *PCIT adaptation for foster care with group workshops and phone consultation*	Decrease in child disruptive/externalizing behavior[91, 92, 94] Decrease in child internalizing symptoms[91, 94] Decrease in caregiver burden associated with child disruptive/externalizing behavior[91, 92, 94] Decrease in parenting stress[95] Improvement in positive parenting skills[95] Decrease in negative parenting behaviors[95]
PCIT-Informed In-Home Wraparound Program	Decrease in child disruptive/externalizing behavior[29, 45]
Holding Hand Projects (HHP): *Brief, home-based adaptation of PCIT for 2-5 year olds in United Kingdom*	Decrease in child disruptive/externalizing behavior[59] ➢ Sustained at 2-month follow-up[59] Decrease in caregiver burden associated with child disruptive/externalizing behavior[59] ➢ Sustained at 2-month follow-up[59] Improvement in positive parenting skills[59] ➢ Sustained at 2-month follow-up[59] Decrease in parenting stress[59] ➢ Sustained at 2-month follow-up[59] Improvement in parenting confidence[59] ➢ Sustained at 2-month follow-up[59]

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Outcomes with Adaptations and Non-Traditional Modalities (continued…)	
Treatment Modality / Adaptation	**Outcome**
Home-based PCIT	Decrease in child disruptive/externalizing behavior[15, 17-19, 34, 60] ➢ Sustained at 4-6 weeks[18] Improvement in child compliance to caregiver commands[15, 17] Improvement in child global functioning[60] Decrease in negative parenting behaviors[15, 17-19] ➢ Sustained at 4-6 weeks[18] Improvement in positive parenting skills[17-19, 74] ➢ Sustained at 4-6 weeks[18] Improvement in positive parent-child interactions[18] ➢ Sustained at 4-6 weeks[18] Decrease in caregiver burden associated with child disruptive/externalizing behavior[17, 19, 34, 60] Decrease in parenting stress[15, 60] Improvement in developmentally appropriate caregiver expectations[17, 18] ➢ Sustained at 4-6 weeks[18] Decrease in caregiver-child role reversal[17] Improvement in responsive caregiving behaviors (nurturing or behaviors that promote a child's psychological growth)[18] ➢ Sustained at 4-6 weeks[18] Decrease in caregiver use of verbal and/or corporal punishment[17, 18] ➢ Sustained at 4-6 weeks[18] Twice as likely to complete treatment, compared to clinic-based PCIT treatment[19, 34]
PCIT + adjunct in-home coaching	Decrease in caregiver burden associated with child disruptive/externalizing behavior[16] Improvement in positive parenting skills[16] Decrease in negative parenting behaviors[16] Decrease in parenting stress[16]

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Section Six: North Carolina PCIT Treatment Outcomes

The NC Child Treatment Program provides intensive PCIT training and clinical coaching to 30-40 licensed clinicians each year. NC CTP monitors clinical outcomes for a minimum of two clients per clinician-trainee. Additionally, NC CTP monitors caregiver skills mastery.

Across cohorts, comparison of pre-and post-treatment assessment results demonstrates a statistically significant decrease in externalizing behaviors among the majority of children associated with a NC CTP clinician-trainee. Additionally, analysis demonstrates a statistically significant increase in caregiver use of effective behavioral management strategies, with a corresponding decrease in negative or otherwise ineffective strategies.

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