Parent-Child Interaction Therapy for ADHD and related disorders: An overview

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Abstract- Parent–Child Interaction Therapy (PCIT) is a psychosocial treatment for preschoolers with conduct, behavioral problems and their parents. PCIT is empirically validated intervention that is designed for families with young children and was draw from both attachment and social learning theory in which teaching parents to interact with their child in new ways to change the child's behavior. The PCIT provides a comprehensive treatment approach that is focused on increasing positive behavior, decreasing negative behavior, and improving the parent-child relationship. In this overview an attempted has been made to desirable to Parent-Child Intervention Therapy and to provide an overview for research conducted after the introduction of the therapy. It is apparent significant research work had been carried out into behavior and conduct problems. Hence this systematic approach to the child and the parent in the management of behavior and emotional problems would be beneficial to the young research scholars in child clinical psychology and professionals.

Index Terms- Parent-Child interaction Therapy, Behavior Disorders, Parents of children with behavior problems

I. INTRODUCTION

Children with disruptive behaviour constitute the most frequent referrals for child mental health services (Kazdin, Mazurick, & Siegel, 1994) and experience a broad range of impairment that is generally more severe and chronic than that experienced by other clinic-referred children (Lambert, et al., 2001). Early disruptive behaviour persists across stages of development (Barkley, et al., 1991; Campbell, 1995; Moffitt, 1993) and is a powerful predictor of subsequent delinquency and criminal behaviour (Loeber, et al., 1995) as well as a host of personal and social difficulties in adulthood (Loeber, 1991; Robins, 1981). Research shows that 19% students were suffering from learning disability in the schools and these children exhibiting significant behavioral problems than normal children in the form of hyperactivity and aggression (Sridevi, et al., 2015). The major casual factor for emotional stress in adolescents are found to be poor family atmosphere and the child's poor health condition may lead hysteria, neurasthenia, anxiety neurosis as well as obsession-compulsion in children with adolescents(Shailaja, Prachi & Sridevi, 2014). The prevalence and chronicity of disruptive behaviour underscores the need for treatments that are both effective for young children and durable. An intensive early intervention is critical in maximizing outcomes for children with behavior problems and evidence suggests that the earlier the intervention, the better the outcome. Research also found that an early intervention can improve adaptive and personal-social behaviors of children with autism (Sridevi & Saroj Arya, 2014). Brestan and Eyberg (1998) reviewed the psychosocial treatment literature for conduct problems and identified several treatment programs that have been empirically supported. Several of the identified programs were specifically intended for young children (Eyberg, Boggs, & Algina, 1995; Hamilton & Mac Quiddy, 1984; Peed, Roberts, & Forehand, 1977; Tremblay, et al., 1995; Webster-Stratton, 1984; Wiltz & Patterson, 1974). CBT intervention is widely studied and empirically validated treatments for anger and aggression in youth and the research was also concluded CBT was effective to reduce 60% in the existing symptoms of emotional and behavioral problem with an adopted adolescent girl (Tripathi & Sridevi, 2016). One of the empirically supported treatments for young children with disruptive behaviour disorders that have examined both immediate and long-term outcomes is parent–child interaction therapy (Brinkmeyer & Eyberg, 2003). Based on developmental theory (Baumrind, 1967), PCIT draws on both attachment and social learning theories in training parents to interact in new ways with their child. During PCIT, parents are observed as they play with their child and are coached in treatment skills that emphasize both responsiveness and limit-setting. The average number of weekly 1-hr sessions typically ranges from 9 to 16, with an average of 13 sessions (Schuhmann, et al., 1998).

Studies have shown statistically and clinically significant improvements in children's behaviour at the end of treatment on parent and teacher rating scales and direct observations in the clinic and at school. Specifically, these studies have documented the superiority of PCIT to wait-list control groups (McNeil, et al., 1999; Schuhmann et al., 1998), classroom comparison groups (McNeil, et al., 1991), and group parent training (Eyberg & Matarazzo, 1980). PCIT outcome studies have demonstrated positive changes in parents' interactions with their child, including increased reflective listening, physical proximity, and pro-social verbalization, and decreased criticism and sarcasm at treatment completion (Eisenstadt, et al., 1993; Schuhmann et al., 1998). Studies also have shown significant changes on parents' self-report measures of psychopathology, personal distress, and parenting locus of control (Eyberg et al., 1995; Eyberg & Robinson, 1982).

Maintenance of treatment gains following completion of PCIT has been examined in only a few studies to date. Short-term follow-up studies have shown maintenance on observational

measures of parent praise, commands, and criticism and child compliance; parent ratings of child externalizing and internalizing problems and activity level; parent self-reports of stress, competence, and control; and child self-reports of self-esteem (Eisenstadt et al., 1993; Nixon, et al, 2003; Querido & Eyberg, 2003). Longer term (1 to 2 year) follow- up studies have demonstrated maintenance of gains in observed parenting skills and child deviant and noncompliant behaviours with their parents, and parent reports of child activity level and conduct problems, as well as the absence of disruptive behaviour diagnoses for most of the children (Eyberg et al., 2001). Longer term maintenance of children's changes in school behaviours have also been found on classroom observational measures of compliance and teacher ratings of disruptive behaviour (Funderburk, et al., 1998). Recently, the first controlled follow-up study of PCIT compared 23 families who had completed treatment with 23 families who had not (Boggs, et al., 2003). In this study, parents reported significantly less frequent disruptive behaviour at 1 to 3 year follow-up for children who completed treatment, and large effect sizes were obtained in the treatment-completer group.

Parent child interaction therapy (PCIT)

Parent–child interaction therapy (PCIT) is a psychosocial treatment for preschoolers with conduct, behavioral problems and their parents. Parent–Child Interaction Therapy (PCIT) was originally developed in the 1970s by Sheila Eyberg for families of children ages 2 to 7 diagnosed with disruptive behavior disorders. PCIT is an evidence-based behavioral parent training program and it is working with parents and their young children. In this program the therapist coaches the parent during real-time interactions with the child. The distinguishing feature of PCIT is that it focuses on improving the quality of the parent–child relationship by coaching parents in specific skills as they interact with their child. PCIT is empirically validated intervention that is designed for families with young children and was drawn from both attachment and social learning theory in which teaching parents to interact with their child in new ways to change the child's behavior. Early intervention is critical to prevent negative developmental course and outcomes. The PCIT emphasizes a comprehensive treatment approach that is focused on increasing positive behavior, decreasing negative behavior, and improving the parent-child relationship (McDiarmid & Bagner, 2005). It enables the families to interact with their children and achieve satisfying relationships and positive outcomes for children and their families for years to come (Epps & Jackson, 2000). The major goal of the PCIT is to improve the quality of parent-child relationship, increasing parent skills, improve the child's pro social behavior, and reduce the child behavior problem and parental stress.

The treatment sessions begin as soon as the initial assessment is completed. The PCIT is typically conducted in 1-hour weekly sessions and is usually completed within 9 to 16 weeks. The PCIT consists two phases such as Child-Directed Interaction (CDI) and Parent-Directed Interaction (PDI). Goals of the first phase, the Child-Directed Interaction (CDI), are to improve the quality of the parent–child relationship and strengthen attention and reinforcement for positive child behavior. The CDI includes enhancing the child's self-esteem, promoting pro-social behavior in the child, and reducing the child's anger and frustration. In the CDI, parents learn to follow their child's lead in dyadic play and provide positive attention combined with active ignoring of minor misbehavior. They are taught to use the PRIDE skills such as praise, reflection, imitation, description, and enthusiasm to reinforce positive and appropriate behaviors. Parents also learn to avoid leading or intrusive behaviors such as commands, questioning, criticism, sarcasm, and negative physical behaviors. This phase forms the foundation for effective discipline training and in the second phase, the Parent-Directed Interaction (PDI). In the PDI, parents learn to lead their child's activity, first in dyadic play situations and later in real-life situations when it is important that their child obey. The authors of the PCIT report that parents are coached in the use of behavior management techniques that promote child compliance and reduce aggressive and disruptive behaviors. They learn to give effective instructions and to follow through with consistent consequences, including praise for compliance and a timeout procedure for noncompliance.

At the University of Oklahoma Child Study Center, researchers conducted the first randomized controlled trial of PCIT with physically abusive families. Results demonstrated significantly reduced recidivism during 21 ⁄2 years after treatment compared with standard community parenting group intervention (Chaffin et al., 2004). PCIT has been designated an evidence-based practice in addressing child abuse (Chadwick Center, 2004). The originations of the therapy specified that parent child Interaction Therapy process has 7 steps with 9-16 weekly sessions.

The process of Parent-Child interaction therapy:

Step-1: Pre treatment assessment of child and family functioning (1-2 sessions)

Initially, in the first session pre treatment assessment of child and family functioning are carried out. In this session, the information is gathered on history and presenting problems Questionnaires are given, and the therapist observes (and may videotape) a sample of how the parents and child relate to one another. The interactions between parent and child; child behaviors, parental perception of stress related to being a parent, and as well as parents' own perceptions of the difficulty of their child's behaviors are assessed in these sessions. Feedback regarding assessment results and treatment planning is provided to families either at the end of the pre-treatment assessment session or in a separate "therapy orientation session." Assessment tools used are Child Behavior Checklist – Parent Form, Eyberg Child Behavior Inventory, Parenting Stress Index, Social Skills Rating System, Conner's Parent Rating Scale – Revised, Vineland Adaptive Behavior Scales, Childhood Autism Rating Scale, Minnesota Multiphasic Personality Inventory –2 and Beck Depression Inventory.

Step-2: Teaching Child-Directed Interaction skills (1 session)

The step-2 contains Child Directed Interaction teaching session which is conducted in one session. In this session the therapist meets only with the parents and teaches them the Child Directed Interaction basics by using didactic presentation, discussion, live modeling, and role-playing. The parents are the active participants for these sessions.

The process of Child Directed Interaction is to describe the goal of behavior play therapy and explain the rationale for the use of brief daily home "play therapy". The goal of the behavior play therapy is based on presenting concern or problem and it is important to convey that playtime is a therapeutic intervention and not "just playing" with the child. Play therapy should not be viewed as a privilege that the child can earn or lose and it should be done for at least 5 minutes every day with the child. In this session, illustrate "Do" and "Don't" skills of behavioral play therapy and use of strategic attention and selective ignoring are discussed. The "Do" skills (**DRIP**) explains as **D**escribe appropriate behvaiour, **R**eflect appropriate verbalizations, **I**mitate appropriate play, **P**raise pro-social behavior. The "Don't" Skills are giving commands or making requests, asking questions, criticizing or correcting in a negative way. The usage of selective ignoring explains that parents have to identify behaviors or qualities which they would like to see diminished and in order for ignoring to be effective, the child must be doing the problem behavior to get a reaction or attention from the parent. In this session therapist helps the parents to analyze whether their attention rewards the child for engaging in each of the behaviors and whether the removal of attention should be expected to impact the behavior. Parents must also understand that once they begin to ignore a behavior they must continue to ignore the behavior until it stops occurring. It is important for parents to understand that a behavior that is ignored will get worse before it gets better and parents should determine if they can tolerate having the behavior get worse before it gets better.

Step-3: Coaching Child-Directed Interaction skills (CDI) (2–4 sessions)

The Child Directed Interaction coaching sessions begins with a 5- minute observation of the interaction, coded by the therapist, which indicates the primary focus of the session. During coaching, the therapist prompts and reinforces the parent's use of the pride skills and points out their positive effects on the child's behavior. The therapist has to encourage and shape reciprocal interactions and responsive parenting.

Step-4 & 5: Teaching and coaching Parent-Directed Interaction skills (PDI) (1 session and 4-6 sessions)

During Parent Directed Interaction (PDI), parents continue to use their Child Directed Interaction (CDI) skills, but they also learn to direct their child's behavior by using effective commands and specific consequences for compliance and noncompliance. This PDI teaching session consists of didactic information, discussion, role-playing, and time out procedure with each parent and following on these sessions.

Parents are taught effective commands, and the command should be direct rather than indirect. For Example**: "**Please hand me the block" instead of "Will you hand the block?". The precise steps that must be followed after a running command to perform a specific commands is given to the child like, "Good job of putting the toys away" and "I like the way you're playing so gently with the toys".

Parents are taught to give a labeled praise if the child obeys or to initiate the time-out procedure if the child disobeys. The parents are again observed together with the child for several sessions of direct skills coaching. These sessions begin in the clinic setting and could be extended to community settings. Treatment is concluded with a "graduation session" when all of the presenting problems have been resolved or substantially improved. Upon graduation, parents receive a certificate and children receive a prize (e.g., blue ribbon) to acknowledge their successes, and the parents are asked to review handouts summarizing PDI techniques prior to the next session.

Step 6: A post-treatment of child and family functioning (1–2 sessions)

Post treatment evaluation sessions will be administered before therapies are repeated. End of this session, feedback is provided to the family in which pre- to post-treatment improvements are reviewed. This session helps parents to solidify their recognition of improvements that have been occurring gradually over several weeks of treatment. For most families, the full course of treatment can be conducted in approximately twelve sessions.

Step 7: Boosters (as needed)

A booster session is usually scheduled at 3 months but it could be occurred earlier if needed. Additional booster sessions may be scheduled to enhance maintenance of parenting skills and address problems that arise as children face new developmental challenges.

Parent-Child Interaction therapy and its effects on ADHD

The Child Directed Intervention with ADHD children is to provide feedback to parents regarding test results and educating the parents about ADHD and its treatment program and progress in the initial session. During CDI coaching, the therapist prompts and reinforces the parent's use of the pride skills and points out their positive effects on the child's behavior. The therapist has to encourage and shape reciprocal interactions and responsive parenting. CDI help parents to understand the importance of behavioral descriptions in helping children with ADHD to sustain attention. The major behavioral descriptions key functions with ADHD children are stimulation for "on-task behavior" in which the task becomes more stimulating to the child. It helps children to organize their thoughts and make them to stick with one activity for longer periods of time and to feel proud of their accomplishments. When parents describe behavior in a step-by-step fashion, they are helping their children to think in a step-by-step, linear way. The other behavioral description is that they prompt children to develop self-talk. CDI in which the parent provides a "running commentary" of almost everything the child is doing, the child begins to imitate descriptive language. First, the child may talk out loud when playing alone, describing the child's own play (e.g., "I'm putting the man in the tractor; He's going to feed the animals"). These descriptions become internalized and the child can silently talk the way through tasks and this self-talk increases the attention span of children with ADHD. A benefit of restricting CDI to the tabletop is that, it provides numerous opportunities to practice ignoring and redirecting inappropriate behavior, skills that are vitally important when parenting children with ADHD. Parents could train to ignore when children leave the table, describe their own play enthusiastically and provide attention and praise when the child returns to the table. Another benefit of using a table for

CDI is that it enables children to remain seated, an important skill for classroom success.

The Parent Directed Intervention with ADHD Children coaches to keep parents from giving rapid-fire commands without allowing their children the opportunity to comply. Parents are "bite their tongues" after giving a command in order to give their children five seconds to understand the command and initiate a response. Therapist will train the parents to wait for the child's response for each command which they give and to praise the child when they complete the task. ADHD children often hurt and beat their siblings and friends by accidentally. Parents have to train to use time out technique when the child shows aggressive behavior or hurt the siblings inappropriately (e.g., Kung Fu kicking, sword fighting with sticks) to provide the children with an opportunity to calm down and to encourage them to use better judgment in the future. In contrast, it is not recommend to use a time-out technique for incidental hurting that occurs during appropriate play (e.g., stepping on another child's toe). In those situations, the children are encouraged to express appropriate remorse and to comfort the injured party. The end of PDI, focus is on coaching situations that are more challenging for children with ADHD such as academic tasks.

CDI draws from attachment theory in its aims to restructure the parent-child relationship and provide a secure attachment for the child. Parents are taught skills that foster positive, nurturing interaction patterns. This phase of treatment recognizes that parents can have a particularly dramatic effect on their child's behavior during the early preschool years when children are more responsive to parental attention and less susceptible to the influence of peers, teachers, or developmental autonomy than in later years (Eyberg, Schuhmann, & Rey, 1998).

Eisenstadt, et al., (1993) conducted a research on the effectiveness of Parent-Child Interaction Therapy (PCIT) for 24 mother-child dyads with children with behavior problems children. Families received 14 weekly sessions of PCIT, with half receiving Child-Directed Interaction training first (CDI-First group) and half receiving Parent-Directed Interaction training first (PDI-First group). At mid treatment, the PDI training stage was more effective than the CDI stage for reducing noncompliance and disruptiveness. It also found that the PDI-First group was better improved on parent report of conduct problems, and mothers were also satisfied with therapy.

Research indicates that externalizing behavior originates from multiple child and family factors. Child factors may include difficult temperament (Bates, et al., 1991), hyperactivity (Loeber & Keenan, 1994), faulty social information processing (Crick & Dodge, 1994), and genetic difficulties. These child factors interact with adverse family factors in the development and maintenance of externalizing behavior (Kazdin, 1987). Family factors may include maternal depression (Forehand, Furey, & McMahon, 1984; Webster-Stratton & Hammond, 1990), stressful life events (Campbell, 1998), anger (Wolfe, 1987), and parent conflict about childrearing (Bearss & Eyberg, 1998; Bearss, Eyberg, & Hoza, 2002), social isolation (Dumas & Wahler, 1983), single-parent status, or poverty (Forehand et al., 1984). Parents' early interactions with their young child appear to be the most proximal parental influence on the child's behavioral development (Campbell, 1997), and parenting practices continue to play a critical role in the maintenance of externalizing behavior throughout childhood and adolescence (McMahon & Estes, 1997).

Parent-Child Interaction Therapy (PCIT) is a short-term, evidence-based intervention designed for families with children between the ages of 2 and 6 who are experiencing a broad range of behavioral, emotional, and family problems. PCIT is an empirically supported treatment for conduct-disordered young children in which parents learn the skills of child-directed interaction (CDI) in the first phase of treatment and parent-directed interaction (PDI) in the second. A study by Schuhmann et al., (1998) examined the effectiveness of parent-child interaction therapy (PCIT) with families of preschool-age children with oppositional defiant disorder. Results indicated that parents in the immediate treatment condition interacted more positively with their child and were more successful in gaining their child's compliance than parents in the wait-list condition. In addition, parents who received treatment reported decreased parenting stress and a more internal locus of control. Parents in the immediate treatment group reported statistically and clinically significant improvements in their child's behavior following PCIT. All families who received treatment reported high levels of satisfaction with both the content and process of PCIT. Preliminary 4-month follow-up data showed that parents maintained gains on all self-report measures (Schuhmann, et al., 1998). Parent-Child Interaction Therapy has long-term benefits for families with young children displaying early conduct problems (Nixon, et al., 2003). A similar study examined the long-term treatment outcome for 13 families who had participated in a treatment study examining the effects of treatment phase sequence one and two years earlier and results suggested that PCIT treatment was successful in achieving long-term gains for most families of conduct-disordered preschoolers and that phase sequence has little impact on treatment outcome (Eyberg et al., 2001).

PCIT originally was developed and evaluated for the treatment of disruptive behavior disorders in young children. PCIT is a promising intervention for externalizing problems in children (Foote, Eyberg &Schuhmann, 1998), focusing on improving child-parent relationships and providing parents with skills to manage disruptive behavior. Parents of children exhibiting externalizing behaviors have often been found to be both power-assertive and lacking in their discipline. This inconsistency serves to strengthen the young child's externalizing behavioral repertoire (Sansbury & Wahler, 1992).

The initial efficacy of the Parent-Child Interaction Therapy (PCIT) for preschool children aged 4–6 years with ADHD, combined or predominantly hyperactive type, and significant behavior problems was conducted by Matos, et al., (2006). They reported that there was a highly significant reduction in pretreatment hyperactivity and inattention and less aggressive and oppositional-defiant behaviors. Conduct problems assessed as problematic, parenting stress associated with their child's behavior and an increase in the use of adequate parenting practices were reported.

Parent–Child Interaction Therapy (PCIT) was adopted for Purto Rican parents of children aged 4-6 with hyperactivity and other significant behavior problems and the authors reported that parents had a high level of satisfaction, a significant reduction in children's externalizing behavior problems, and reduction of

parenting stress and improvement in their practices (Matos, et al., 2006).

The effectiveness of Parent-Child Interaction Therapy with behaviour problem children was conducted by Eisenstadt et al., (1993). They found that families moved from outside normal limits to within normal limits on compliance, conduct problems, activity level, and maternal stress, and showed improvement in internalizing problems and child's self-esteem. There is evidence to suggest that families in which a mother is highly critical or depressed respond poorly to PCIT (Werba, et al., 2002). Further it was concluded that parents actively abusing a drug, or experiencing severe marital discord or psychopathology also may respond poorly to PCIT (Hembree-Kigin & McNeil, 1995).

A study examined the long-term maintenance (3-6yrs of after treatment) of changes following parent–child interaction therapy (PCIT) for young children with oppositional defiant disorder (ODD) and associated behaviour disorders. The mothers of 23 children between the ages of 6 and 12 participated in telephone and mail follow-up assessments. Child behaviour reported at the post-treatment assessment and length of time since treatment were strong predictors of long-term outcome and the results of this study support the long-term effectiveness of PCIT (Hood & Eyberg, 2003).

Michelle, et al., (2009) conducted a study on Early Identification and Intervention for Behavior Problems in Primary Care: A Comparison of Two Abbreviated Versions of Parent-Child Interaction Therapy. Results indicated that decreases in child problem behaviors and ineffective parenting strategies, and increase in parental feelings of control were not significantly different between versions at post-intervention or 6-month follow-up. The Changes during intervention were significantly larger for both groups than changes during pretreatment baseline. Daniel, et al., (2009) conducted a study on Parent-Child Interaction Therapy for Children Born Premature: A Case Study and Illustration of Vagal Tone as a Physiological Measure of Treatment Outcome. The study indicated that maternal reports of child behavior problems and their own stress and depressive symptoms decreased after treatment and the behavioral observations demonstrated improved parenting practices.

II. Conclusion

Parent–child interaction therapy (PCIT) is a psychosocial treatment for preschoolers with conduct, behavioral problems and their parents. PCIT is an evidence-based behavioral parent training program and it is proved to be effective with parents and their young children. It is a treatment program for preschool-age children with ADHD and conduct problems and their families. This treatment is theoretically based, assessment driven, and empirically supported. PCIT an effective program as evidenced by large body of research reports cited in this overview. PCIT decrease disruptive behavior and increase pro-social behavior of the child and improve the psychological functioning of the parents.

References

[1] Bates, J.E., Bayles, D., Bennett, D.S., Ridge, B., & Brown, M. (1991). Origins of externalizing behavioral problems at eight years of age. In D.J. Pepler & K. H. Rubin (Eds.), The development and treatment of childhood aggression (93-119). Hillsdale, NJ: Erlbaum.

[2] Barkley, R.A., Fischer, M., Edelbrock, C., & Smallish, L. (1991). The adolescent outcome of hyperactive children diagnosed by research criteria–III. Mother–child interactions, family conflicts, and maternal psychopathology. *Journal of Child Psychology and Psychiatry*, 32, 233–255.

[3] Baumrind, D. (1967). Childcare practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, 75, 43–88.

[4] Bearss, K., & Eyberg, S.M. (1998). A test of the Parenting Alliance Inventory. *Early Education and Development*, 9, 179-185.

[5] Bearss, K., Eyberg, S.M., & Hoza, J.A. (2002). The parenting allian in divorcing families: Its relation to child adjustment. Manuscript submitted for publication.

[6] Boggs, S.R., Eyberg, S.M., Edwards, D., Rayfield, A., Jacobs, J., Bagner, D. (2003). Outcomes of parent-child interaction therapy: A comparison of dropouts and treatment completers one to three years after treatment. Manuscript submitted for publication.

[7] Brestan, E.V., & Eyberg, S.M. (1998). Effective psychosocial treatments of conduct-disordered children and adolescents. *Journal of Clinical Child Psychology*, 27, 180–189.

[8] Brinkmeyer, M., & Eyberg, S.M. (2003). Parent-child interaction therapy for oppositional children. *Evidence-based psychotherapies for children and adolescents*, 204–223.

[9] Campbell, S.B. (1997). Behavior problems in preschool children: Developmental and family issues. Advances in Clinical Child Psychology, 19, 1-26.

[10] Campbell, S.B. (1998). Developmental perspectives. In T. Ollendick & M. Hersen (Eds.), Handbook of child psychopathology (3rd ed., pp. 3- 35). New York: Plenum Press.

[11] Campbell, S.B. (1995). Behavior problems in preschool children: A review of recent research. *Journal of Child Psychology and Psychiatry*, 36, 113–149.

[12] Chadwick Center. (2004). Closing the quality chasm in child abuse treatment: Identifying and disseminating best practices. Retrieved from http://www.chadwickcenter.org

[13] Chaffin, M., Silovsky, J.F., Funderburk, B., Valle, L., Brestan, E., Balachova, T., Bonner, B.L. (2004). Parent–Child Interaction Therapy with physically abusive parents: Efficacy for reducing future abuse reports. *Journal of Consulting and Clinical Psychology*, 72, 500–510.

[14] Crick, N.R., & Dodge, K.A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115, 74-101.

[15] Daniel, M.B., Stephen, J.S., Cynthia, L.M., Betty, R.V., Matthew, H., Sheila, M.E., Barry, M.L. (2009). Parent-Child Interaction Therapy for Children Born Premature: A Case Study and Illustration of Vagal Tone as a Physiological Measure of Treatment Outcome. Cognitive and Behavioral Practice, 16(4), 468–477.

[16] Dumas, J.E., & Wahler, R.G. (1983). Predictors of treatment outcome in parent training: Mother insularity and socioeconomic disadvantage. *Behavioral Assessment*, 5, 301-313.

[17] Eisenstadt, T.H., Eyberg, S., McNeil, C.B., Newcomb, K., & Funderburk, B. (1993). Parent-Child Interaction Therapy with Behavior Problem Children: Relative Effectiveness of Two Stages and Overall Treatment Outcome. Journal of Clinical Child Psychology, 22(1), 42-51.

[18] Eyberg, S.M., Boggs, S.R., & Algina, J. (1995). Parent–child interaction therapy: A psychosocial model for the treatment of young children with conduct problem behavior and their families. Psychopharmacology Bulletin, 31, 83–91.

[19] Epps, S., & Jackson, B. (2000). Empowered families, successful children: Early intervention programs that work. Washington, DC: American Psychological Association.

[20] Eyberg, S.M., Funderburk, B., Hembree-Kigin, T., McNeil, C., Querido, J., & Hood, K. (2001). Long-term effectiveness of parent–child interaction therapy: A two-year follow-up. Child and Family Behavior Therapy, 23, 1–20.

[21] Eyberg, S.M., Funderburk, B.W., Hembree-Kigin, T.L., McNeil, C.B., Querido, J.G., & Hood, K.K. (2001). Parent-Child Interaction Therapy with Behavior Problem Children: One and Two Year Maintenance of Treatment Effects in the Family. Child & Family Behavior Therapy, 23(4), 1-20.

[22] Eyberg, S.M., Schuhmann, E., & Rey, J. (1998). Psychosocial treatment research with children and adolescents: Developmental issues. *Journal of Abnormal Child Psychology*, 12, 347-357.

[23] Eyberg, S.M., & Matarazzo, R.G. (1980). Training parents as therapists: A comparison between individual parent-child interaction training and parent group didactic training. *Journal of Clinical Psychology*, 36, 492–499.

[24] Foote, R., Eyberg, S.M., & Schuhmann, E. (1998). Parent-Child Intraction Approaches to the treatment of child with conduct problems. In T. Ollendick and R. Prinz (EDS). Advances in Clinical Child Psychology (pp. 125-151). New York: Plenum.

[25] Forehand, R.L., Furey, W.M., & McMahon, R.J. (1984). The role of maternal distress in a parent training program to modify child non-compliance. *Behavioral Psychotherapy*, 12, 93-108

[26] Funderburk, B.W., Eyberg, S.M., Newcomb, K., McNeil, C.B., Hembree-Kigin, T., & Capage, L. (1998). Parent–child interaction therapy with behavior problem children: Maintenance of treatment effects in the school setting. *Child and Family Behavior Therapy*, 20, 17–38.

[27] Hamilton, S.B., & Mac Quiddy, S.L. (1984). Self-administered behavioural parent training: Enhancement of treatment efficacy using a time-out signal seat. *Journal of Clinical Child Psychology*, 27, 13–27.

[28] Hembree-Kigin, T.L., & McNeil, C.B. (1995). Parent-Child Interaction Therapy. New York: Plenum Press.

[29] Hood, K.K., & Eyberg, S.M. (2003). Outcomes of Parent–Child Interaction Therapy: Mothers' Reports of Maintenance Three to Six Years After Treatment. *Journal of Clinical Child and Adolescent Psychology*, 32(3), 419–429.

[30] Kazdin, A.E. (1987). Treatment of antisocial behavior in children: Current status and future directions. *Psychological Bulletin*, 102, 187-203.

[31] Kazdin, A., Mazurick, J.L., & Siegel, T.C. (1994). Treatment outcome among children with externalizing disorder who terminate prematurely versus those who complete psychotherapy. *Journal of the American Academy of Child and Adolescent Psychiatry*, 33, 549–557.

[32] Lambert, E.W., Wahler, R.G., Andrade, A.R., & Bickman, L. (2001). Looking for the disorder in conduct disorder. *Journal of Abnormal Psychology*, 110, 110–123.

[33] Loeber, R. (1991). Antisocial behavior: More enduring than changeable? *Journal of the American Academy of Child and Adolescent Psychiatry*, 30, 393–397.

[34] Loeber, R., Green, S.M., Keenan, K., & Lahey, B.B. (1995). Which boys will fareworse? Early predictors of the onset of conduct disorder in a six-year longitudinal study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34, 499–509.

[35] Loeber, R., & Keenan, I.L. (1994). Interaction between conduct disorder and its comorbid conditions: Effects of age and gender. *Clinical Psychology Review*, 14, 497-523.

[36] McDiarmid, M.D., & Bagner, D.M (2005). Parent child interaction therapy for children with disruptive behavior and developmental disabilities. *Journal of Education and Treatment of Children*, 28(2), 130-141.

[37] McMahon, R.J., & Estes, A.M. (1997). Conduct problems. In E.J. Mash & L. G. Terdal (Eds.), Assessment of childhood disorders (pp. 130-193). New York: Guilford Press.

[38] McNeil, C.B., Capage, L.C., Bahl, A., & Blanc, H. (1999). Importance of early intervention for disruptive behavior problems: Comparison of treatment and waitlist-control groups. *Early Education and Development*, 10, 445–454.

[39] McNeil, C.B., Eyberg, S., Eisenstadt, T.H., Newcomb, K., & Funderburk, B. (1991). Parent–child interaction therapy with behavior problem children: Generalization of treatment effects to the school setting. *Journal of Clinical Child Psychology*, 20, 140–151.

[40] **Michelle, D.B., Kelly, A.O. Carolyn, G.C. Sheila, M.E.** (2009). Primary Care: A Comparison of Two Abbreviated Versions of Parent-Child Interaction Therapy. *Behaviour Therapy*, 41(3), 375-387.

[41] Moffitt, T.E. (1993). Adolescence-limited and life-course persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100, 674–701.

[42] Nixon, R.D.V., Sweeney, L., Erickson, D.B., Touyz, S.W. (2004). Parent-Child Interaction Therapy: One –and Two-Year Follow-up of Standard and Abbreviated Treatments for Oppositional Preschoolers. *Journal of Abnormal Child Psychology*, 32(3), 263-271.

[43] Nixon, R.D.V., Sweeney, L., Erickson, D.B., & Touyz, S.W. (2003). Parent–child interaction therapy: A comparison of standard and abbreviated treatments for oppositional defiant preschoolers. *Journal of Consulting and Clinical Psychology*, 71, 251–260.

[44] Peed, S., Roberts, M., & Forehand, R. (1977). Evaluation of the effectiveness of a standardized parent training program in altering the interaction of mothers and their noncompliant children. *Behavior Modification*, 1, 323–350.

[45] Querido, J.G., & Eyberg, S.M. (2003). *Early intervention for child conduct problems in Head Start families.* Manuscript submitted for publication.

[46] Robins, L.N. (1981). Epidemiological approaches to natural history research: Antisocial disorders in children. *Journal of the American Academy of Child Psychiatry*, 20, 566–680.

[47] Sansbury, L.L., & Wahler, R.G. (1992). Pathways to maladaptive parenting with mothers and their conduct disordered children. *Behavior Modification*, 16, 574-592.

[48] Schuhmann, E.M., Foote, R.C., Eyberg, S.M., Boggs S.R., & Algina, J. (1998). Efficacy of Parent Child Interaction Therapy: Interim Report of Randomized Trial with Short –Term Maintenance. Journal of Clinical Child Psychology, 27(1), 34-45.

[49] 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, 34–45.

[50] Shailaja, G., Prachi, S., & Sridevi.G. (2014). Causal factors for emotional stress in adolescents. Journal of Rural & Community Psychiatry, 1(1), 55-61.

[51] Sridevi, G., George, A.G., Sriveni, D., Rangaswamy, K. (2015). Learning disability and behaviour problems among school going children. Journal of Disability Studies, 1(1), 4-9.

[52] Sridevi, G., Arya, S. (2014). Effect of Early Intervention in Autism: A Case Study. International Journal of Scientific and Research Publications, 4(4), 268-278.

[53] Tremblay R.E., Pagani-Kurtz, L., Masse, L.C., Vitaro, F., & Phil, R. (1995). A bimodal preventive intervention for disruptive kindergarten boys: Its impact through mid-adolescence. *Journal of Consulting and Clinical Psychology*, 63, 560–568.

[54] Tripathi, M.A., Sridevi, G. (2016). Psychotherapeutic Interventions in Emotional and Behavioural Problems with Adolescents. Chronic Mental Illness and the Changing Scope of Intervention Strategies, Pages-321.

[55] Webster-Stratton, C. (1984). Randomized trial of two parent-training programs for families with conduct-disordered children. *Journal of Consulting and Clinical Psychology*, 52, 666–678.

[56] Wiltz, N.A., & Patterson, G.R. (1974). An evaluation of parent training procedures designed to alter inappropriate aggressive behavior of boys. *Behavior Therapy*, 5, 215–221.

[57] Webstei-Stratton, C., & Hammond, M. (1990). Predictors of treatment outcome in parent training families with conduct problem children. *Behavior Therapy*, 21, 319-337.

[58] Werba, B., Eyberg, S.M., Boggs, S.R., & Algina,J. (2002). Predicting outcome in Parent-Child Interaction Therapy: Success and attrition. Manuscript submitted for publication.

[59] Wolfe, D.A. (1987). Child abuse: Implications for child development and psychopathology. Newbury Park, CA: Sage.

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