Best Practice and Wisdom Sharing II: From Challenge to Confidence
Family-focused Early Intervention

The Efficacy of Parent-Child Interaction Therapy (PCIT) with Children with ADHD and Their Parents

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Aim and Outline

Aim:
- To demonstrate the applicability of PCIT on Children with ADHD and their parents in Hong Kong

Outline:
- Introduction on Parent-Child Interaction Therapy (PCIT)
- Quantitative Results of Efficacy of PCIT with Children with ADHD and their Parents
- Qualitative Results of Efficacy of PCIT with Children with ADHD and their Parents
- Implications and Conclusions
PART I

Introduction on
Parent-Child Interaction Therapy (PCIT)
PCIT and PCIT in Hong Kong

- PCIT is an evidence-based treatment program for young children displaying disruptive, oppositional, and defiant behavior and their parents.
- Developed by Dr. Sheila Eyberg of the University of Florida, the United States.
- Provided in USA, Germany, Netherlands, Australia, Norway, New Zealand, Japan, Korea, Taiwan and Hong Kong.

**PCIT in Hong Kong**

- Adapted since 2004 for use by TWGHs for Chinese families in Hong Kong (Leung et al., 2009; Leung et al., 2014; Leung et al., 2016).
- PCIT in TWGHs has served over 1,500 parent-child.
- Delivered by qualified PCIT practitioners in community-based service centres.
Service Goals and Targets

Service Goals:
- Improvement in parent-child relationship
- Increase in parenting skills
- Increase in child pro-social behaviors
- Decrease in child behavior problems
- Decrease in parenting stress
- Decrease in use of corporal punishment

Targets:
- Parents encountering great parenting difficulties or parental stress
- Children aged 2 to 7 with behavioral symptoms
PCIT Characteristics (1)

- Parent-child participation
- Two treatment phases
  - Child-Directed Interaction (CDI) sessions on parent-child relationship enhancement
  - Parent-Directed Interaction (PDI) sessions on strategies to improve child compliance
PCIT Characteristics (2)

- Use measures to guide treatment
  - Using ECBI, PSI, CBCL, DASS, DPIC & TAI

- Follow treatment protocol and coding manual
PCIT Characteristics (3)

- Live coding and coaching
- Intensive treatment and homework practice
PCIT in Hong Kong (1)

- Territory-wide service locations
- Multi-sectoral collaborations

Trained Therapists

Overseas Advisors

Local Academics

Multi-disciplinary Professionals
PCIT in Hong Kong (2)

- Applied PCIT to specific target groups:
  - Established/at risk child abuse cases
  - Children with ADHD features
  - Children with other SEN, including Language delay, ASD

- Accumulated solid evidence on the usefulness of PCIT on Hong Kong families

Efficacy of Parent–Child Interaction Therapy With Chinese ADHD Children: Randomized Controlled Trial

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Abstract

Purpose: This study aimed to evaluate the efficacy of Parent-Child Interaction Therapy (PCIT) in Chinese children with attention-deficit/hyperactivity disorder (ADHD) or ADHD features. Methods: This study adopted a randomized controlled trial design without blinding. Participants were randomized into either the intervention group (n = 32) and offered PCIT by trained PCIT practitioners or the waitlist control group (n = 32) and offered PCIT after the intervention group had completed treatment. Parent participants were requested to complete questionnaires on their children’s behavior and their parental stress. PCIT practitioners observed parent–child interactions according to a coding system. Results: Analysis was by intention to treat. The results indicated a significant decrease in child behavior and attention problems, parental stress, and negative parenting practices and an increase in positive parenting practices in the intervention group at postintervention ($p \leq .002$ in all cases). Conclusion: This study provided promising evidence on the effectiveness of PCIT in Chinese children with ADHD or ADHD features.
PART II
The Efficacy of Parent-Child Interaction Therapy with Children with ADHD and Their Parents

Quantitative Results
Participants

- 64 target parents with children aged 2 to 7
  - Target children diagnosed with ADHD/ADHD features
  - 32 parent-child dyads were randomly allocated to the intervention group
  - 32 were randomly allocated to the wait-list control group, who were provided with PCIT after 3.5 to 5 months
Measurement Points

- Intervention group - 4 measurement points
  - Pre-intervention
  - Mid-term
  - Post-intervention (immediately after the program)
  - Follow-up (three months after intervention)

- Wait-list control group – 2 measurement points
  - Pre-intervention and post-intervention with an interval of about 3.5 to 5 months
Measures

- Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999) - 36 items on disruptive behavior
  - Intensity Scale
  - Problem Scale

- Child Behavior Checklist (CBCL; Leung et al., 2006) – 120 items on child behavior problems
  - Attention Problems
  - Internalizing Problems
  - Externalizing Problems
Measures

- Parenting Stress Index (short form) (PSI; Abidin, 1990) - 36 questions that measures level of parenting stress
- Depression, Anxiety and Stress Scale (DASS; Lovibond & Lovibond, 1995) - 21 items measuring the negative emotions of depression, anxiety and stress
- Frequency of corporal punishment during the past seven days
Measures

  - Behavioral Description (BD)
  - Reflective statement (RF)
  - Labeled Praise (LP)
  - Command/Question/Negative Talk (C/Q/NTA)
  - Socio-demographic information
Flow of Participants

- Recruited into study ($N = 64$)
- Random assignment
  - Intervention group ($n = 32$)
    - Completed pre-intervention measures ($n = 32$)
      - Terminated treatment before completion ($n = 2$)*
        - Completed post-intervention measures ($n = 31$)
  - Wait-list control group ($n = 32$)
    - Completed pre-intervention measures ($n = 32$)
    - Completed post-intervention measures ($n = 32$)

* One case quitted because of busy schedule and another one quitted because of health problem
Data Analysis

- Analysis by intention-to-treat
- Missing data estimated using multiple imputation
- Univariate Analysis of Covariance (ANCOVA)
  - Independent variable – group status
  - Dependent variables – post-intervention measures
  - Covariates – pre-intervention measures
Results:
Intervention and Control groups comparable at baseline

- No significant differences in socio-demographic characteristics between intervention and wait-list control group
- No significant differences in pre-intervention measures between intervention and wait-list control group
- Reliability estimates above .70 for all measures except CBCL Attention Problems
Results after Intervention

- **Overall success rate – 78.1% (25 successful cases)**
  - Post-intervention ECBI scores below the clinical range
  - Achieved CDI mastery, or both CDI and PDI mastery
  - Parental stress reduced
  - Corporal punishment on children reduced
- **Gains maintained after 3 months**
Part III
The Efficacy of Parent-Child Interaction Therapy with Children with ADHD and Their Parents

Qualitative Results
Efficacy Study: Focus Groups
Discussion Themes and Excerpts

- Views of 7 participating parents with children with ADHD
  - Changes in children and participating parents
  - PCIT delivery format
  - Responses of other family members
- Views of 5 PCIT therapists
  - Changes in parent-child relationship
  - PCIT impact on child attention and behavior
Participating parents with ADHD children: Improved parent-child communication

- I have learnt how to discipline him and how to communicate with him... (Group 1: 27B)
- 學識點樣教佢呀，即係同佢溝通呀... (Group 1: 27B)

- There are some changes. She (daughter) used to cry easily at home for no reason. It drove me crazy, and I spanked her and threw things. Since I came to this class, I use time-out chair which is helpful and she restrains. It is now better, and she has improvement in self-discipline now. (Group 1: 57C)
- 有啲改變嘅，以前一返到屋企郁下又喚呀，都唔知做咩係咁容易就係度喚嘅，聽到煩呢又打佢，仲更加令到我成個人癲哂咗，就嚟到上堂。之後就而家，話咩「暫停枱」呀都會用喲，佢都會驚，而家都好喇，呢一兩次佢就自覺咗好多喇，知道係咩啲樣。 (Group 1: 57C)
Participating parents with ADHD children: Improved parent-child relationship (1)

- I have not spanked him (son) since I joined this service... (Group 1: 24A)
- 自從用咗呢個服務之後呢，我都好耐無打過佢（仔）喇... (Group 1: 24A)

- Yes. I am irritated less often, but am spending more time on understanding him (son) and playing with him... (Group 1: 45B)
- 係呀。自己又勞少啲氣，不過就花多啲時間了解佢（仔），同佢玩囉要... (Group 1: 45B)
Participating parents with ADHD children: Improved parent-child relationship (2)

- He (son) has improved a lot comparing to a few years ago before training. The relationship with mother has also improved, because there is interaction in the process... (Group 2: 23D)

- 比起以前喺幾年啱啱發現呀，或者接受training之前呢，（仔）係明顯咁樣好咗好多。咁同媽咪嘅關係亦都好咗，因為真係喺個過程裡面真係互動啦... (Group 2: 23D)
Participating parents with ADHD children: PCIT delivery format helped

- I think it is good to have earbud to listen to instruction, so I know what to do. If it is done afterwards, I would have missed it then... (Group 2: 111D)
- 即係有耳機聽住，令我知道應該點做，因為如果你事後講返俾我聽，咁可能我都已經miss咗咁樣囉... (Group 2: 111D)

- This is very good as it is a direct experience comparing to seminar. (Group 2: 126C)
- 講座同practice嘅分別囉，即時體驗到，所以非常之好。 (Group 2: 126C)
Participating parents with ADHD children: PCIT impact benefitted other family members

- Since I taught the elder son with this skill and got improvement, it is so good that my daughter was also benefited from it. (Group 1: 26A)

- 因為我教大仔用咗呢個方法呢，好咗之餘呢，阿妹又跟住呢，順帶之下呢，阿妹又有得著，係囉好好呀呢個。 (Group 1: 26A)

- I told my family members such as grandma and grandpa that they spoiled the son and how he should be disciplined instead... (Group 1: 27B)

- 我會話返俾我啲屋企人聽，即係譬如呀嫲、阿公呀喺喺，縱到佢好犀利，我要話返俾佢聽唔係我講嘅，係喺人講嘅，話應該點樣教佢... (Group 1: 27B)
PCIT Therapists: PCIT improved parent-child relationship

- Through playing with toys, we can see that child do care and love parent. This leads the parent to realize that the child is not bad in every aspect, but only has difficulties in the self-controlling or in school. When parent realized the child’s love, parent-child bonding is developed. Parents will become less stressful even though the real problem has not been fully solved yet. This is especially obvious on ADHD children, they experience less scolding from their parents which in return helps the children to improve their attitude, and parents will also become less stressful. (C54)

- 譬如話玩玩具嘅時候，好多時小朋友其實係錫家長嘅，所以喺個部份可以引發返家長體會到原來小朋友佢唔係全部都唔好，佢只係響一啲控制上面啲，或者係學業上面啲，佢有困難啫，佢係實質佢係愛錫我呀，喺個bonding建立返，咁其實喺個部份可以鬆少少，咁雖然實質喺個困難都係未解決到，因為個部份可以鬆少少，但我覺得小朋友對家長個態度，其中我覺得響ADHD喺個部份可以鬆少少，係實質喺個部份可以鬆少少。
PCIT Therapists: PCIT impact on child attention and behavior

- Attention is rather abstract... I do think that it was difficult to have significant progress on attention. (C86)

- 注意力呢係比較抽象啲我覺得...咁我就覺得attention係難啲有比較大進展囉。 (C86)

- Regarding the attention part, I think we have gap between our expectation and parents’. For example, when we were observing the behaviors of the child when they were playing in the room, we could see some improvement in their attention, though it might not be very obvious, but the attention span had become longer or stay in the room for longer. However, parents would focus more on children’s attention on their homework. It is difficult to replicate this progress to homework... (B89)

- 我諗attention咁個位呢，就係我哋同家長個期望都係有啲分別，即係譬如如我啲睇，第一我啲喺觀察室裡面睇小朋友去玩玩具啦，咁其實我啲都睇到小朋友啲專注力其實有所改善嘅，雖然未必好明顯嘅，但係時間可以長一啲，或者佢可以玩耐少少先至離開間房再出出入入呢一啲嘅部分，但係家長容易啲可以睇到功課上面嘅專注力，而呢一樣啲我啲會覺得較難將佢啲個進度帶返去喺功課上面... (B89)
PART IV

Implications and Conclusions
Research Conclusions

- The PCIT intervention on a group of parents with children aged 2-7 diagnosed with ADHD/ADHD features had significantly
  - reduced child behavior
  - reduced child attention problems
  - reduced parenting stress and negative emotions
  - reduced negative parenting practices
  - increased positive parenting skills, and
  - reduced the use of corporal punishment
Implications for Practice

- PCIT can be considered as an option to support ADHD children and their families.
- Treatment which addresses dyads instead of individuals as units of intervention introduce an systems perspective in understanding and managing challenges in parenting.
- Coaching is a technique that advances parent training from mere transmission of knowledge to an enhancement of parents’ perceived competence and positive perception of their children.
- Prompted a new project applying parent coaching techniques: TWGHs Jockey Club “Parents as Coaches” Project for supporting families of children with SEN.
**References**


