

Behavioural Parent Training in Treating Noncompliance Behaviour among Preschool Children with Attention Deficit Hyperactivity Disorder (ADHD)

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Abstract

Behavioural parent training programmes have been approved by the American Academy of Paediatrics (AAP) as effective for treating children with disruptive behaviour problems. The aim of this study is to examine the application of behavioural parent training in treating noncompliance behaviours among preschool children with ADHD. These children attended Special Integrated Preschool Education under Malaysia Ministry of Education (MOE) in Selangor. Parent-Child Interaction Therapy (PCIT) is one of the promising behavioural parent training programmes has been employed in the study. The A-B single-case experimental design was applied to systematically test the effect of PCIT intervention throughout four different phases: Baseline (A₂), Intensive Treatment (B-IT), Maintenance Treatment (B-MT) and Follow-up (F₁). Parent's verbalisation of Do and Don't Skills and child compliance behaviour toward parental commands were measured repeatedly using four different instruments. The Eyberg Child Behaviour Inventory (ECBI) and Daily Parent Observation (DPO) were used to measure child's noncompliance behaviour, Dyadic Parent-Child Interaction Coding System-III (DPICS-III) was used to measure parent's verbalisation and child compliance behaviour and Therapy Attitude Test (TAI) was used to measure parents' satisfaction toward the treatment. Findings of this study showed that PCIT was effective in reducing noncompliance behaviour among preschool children with ADHD. Parenting module as one of the early childhood interventions that based on the PCIT was recommended to improve positive parenting practices in rearing the children with behavioural problems.

Keywords: Behavioural Parent Training, ADHD and Noncompliance Behaviours

1. Introduction

With the rapid development, Malaysia is becoming increasingly aware of the importance of child counselling and psychological services. The counselling alone does not help to treat children with disruptive behaviour disorder such as ADHD. A traditional counselling in which a child spends time with a counsellor talking about his or her problems or playing with toys does not help because such talk or play therapy alone has not been shown to work for children with ADHD (Abikoff, 1991; Hanna, Hanna, & Keys, 1999). Basically, interventions for children with ADHD begin with young children and focused on behaviours such as aggression, noncompliance and oppositional, which often emerge in the preschool years. When working with preschool children, it is important to directly involve the child's caregivers or parents. Parents' influence on their children is significant and some parenting practices may exacerbate some children's problems (McNeil & Hembree-Kigin, 2010). Behavioural parent training originated in the 1960s is based on behavioural learning theory and play therapy (Scott, 2002). One of the promising behavioural parent training programmes that can be applied by parents in managing their children's disruptive behaviours is Parent-Child Interaction Therapy (PCIT). The PCIT is a form of family counselling and therapy that originally developed by Eyberg (1999) has been used for many years and found to be very effective to treat children with disruptive behaviours. The efficacy of PCIT has not yet fully investigated in Malaysia. Therefore, the purpose of this study is to examine the effect of PCIT as one of the behavioural parent training programmes in treating noncompliance behaviours among preschool children with ADHD in Malaysia.

2. Literature Review

2.1 Prevalent of ADHD among Children in Malaysia

The prevalent of various types of mental health and behaviour problems among children in Malaysia is becoming increasingly more noticeable. Teoh and Kasmini (2000) reported that the prevalent of children behaviour problems ranges between 3.3% (aggression) to 30.9% (somatic complaints). Screening for the symptoms of ADHD in a community survey among Malaysian children and adolescents between ages of 5 to 15 years showed the rate of 3.9% (Toh et al., 2006). Furthermore, the prevalent of ADHD among children indicated that in a sample of admission to a child psychiatric unit, children diagnosed with ADHD formed 25% cases (Toh, Ding, Peng, Maniam, Lim, Abdullah & Sararaks, 2006).

ADHD is characterised by three core behaviours: inattentiveness, impulsiveness and over-activity (hyperactivity) which are at an inappropriate level for the child's age. The latest version of Diagnostic and Statistical Manual, Fifth Edition (DSM-5) categories ADHD into three presentations: ADHD-C (Combined), ADHD-I (Inattentive) and ADHD-HI (Hyperactivity-Impulsivity). Children with ADHD-HI show more aggressive behaviours, while children with ADHD-I tend to be more withdrawn and they are less aggressive than children with ADHD-HI or ADHD-C (American Psychiatric Association (APA), 2013). In relation to the dominant types of ADHD among children in Malaysia, based on the DSM-IV Revised Edition (DSM-IV-TR), Gomez and Hafetz (2011) found that the most prevalent type was ADHD-I (0.96%), ADHD-HI and ADHD-C (0.32%) with a sex ratio of around 4 to 1 in favours of boys.

In addition, the academic under achievement and the prevalent of attention problems among children are often a result of having ADHD. These conditions are reported to be around

9% to 12.5% of Malaysian children aged 4 to 8 years old (Teoh & Kasmini, 2000) and affected their learning abilities. Moreover, ADHD classification involves educational issues as the disorder is associated with the types of cognitive and learning difficulties (Marshall, Hynd, Handwerk & Hall, 1997). In Malaysia, according to Supiah and Geoff (2010), ADHD is one of the new categories of children with Special Educational Needs (SEN), which is grouped under Learning Disabilities (LD) in the Malaysian educational classification.

2.2 Behavioural Parent Training

Behavioural parent training has been evaluated as a treatment of children's disruptive behaviours in hundreds of studies. Most of these studies have been conducted with families of young children between 3 to 12 years of age. Studies have consistently shown behavioural parent training is effective in reducing disruptive behaviour problems, and therefore it is considered as a well-established intervention for children with ADHD (Eyberg, Nelson & Boggs, 2008; Pelham & Fabiano, 2008). Approximately 60% of young children with ADHD tend to develop oppositional disorder characterised by noncompliance behaviour (Parker, 2002). Noncompliance behaviour is one of the most common disruptive behaviour conditions among children who diagnosed with ADHD (Hinshaw & Lee, 2003; Swanson, 2003). Moreover, according to Barkley (2012) the term defiance can be used for many instances of noncompliance behaviour where the child not only fail to obey a directive or rule, but also displays active verbal or physical resistance to comply with such parental directives. For examples, when a child engages in verbal refusal, temper outbursts and even physically aggressing against parents when the parents attempt to impose compliance with a directive on the child. Studies indicated that poor parent-child interaction serves to increase and sustain the occurrences of noncompliance behaviour in children (Barkely, 2012; Beauchaine, Hinshaw, & Pang, 2010).

In relation to this, the early childhood interventions should consist of prevention and treatment which primarily focuses on parent-child interaction. Basically, behaviour therapists recognise that parents play the most important role in their children's development. Therefore, in behavioural parent training, parents are trained to become co-therapists in the treatment of their children's behaviour problems. According to Solomon, Ono, Timmer and Goodlin-Jones (2008), behavioural parent training represents a therapeutic approach in which parents are taught how to improve parent-child interaction, increase desirable child behaviour, reduce children's misbehaviour and bring about a positive family atmosphere. All these approaches are based on extensive research examining parent-child interaction patterns and the ways children learn from parents. Thus, one of the interventions which primarily focus on improving the quality of parent-child interaction that can be applied among parents with ADHD children is PCIT.

The PCIT is an assessment-driven form of behavioural parent training designed for parents with preschool-aged children with disruptive behaviours (Neary & Eyberg, 2002). It is an empirically-supported treatment that places emphasis on improving the quality of the parent-child relationship and changing inappropriate patterns parent-child interaction. According to Eyberg and Boggs (1989), the core of PCIT is twofold, to create nurturing parent-child relationships and to model prosocial behaviours while increasing a child's appropriate and compliance behaviours. The PCIT progresses through two distinct phases of parenting skills: Child-Directed Interaction (CDI) and Parent-Directed Interaction (PDI). The first phase of CDI focuses on enhancing the parent-child interaction and relationship and the second phase of PDI

focuses on improving child compliance behaviours. There are several techniques employed in conducting PCIT and this study employed an Abbreviated Intensive PCIT. This module developed based on combination of abbreviated and intensive formats (Lewis, 2010) in which includes fewer sessions between therapist-patient than the standard PCIT and intensive denotes preserve the core components of the treatment. There are the evidences of the efficacy of abbreviated PCIT which consists of four to five-session of treatments (Graziano, Bagner, Slavec, Hungerford, Kent, Babinski, Derefinko, and Pasalich, 2014; Lewis, 2010; Nixon, Sweeney, Erickson, & Touyz, 2004).

2.3 Research Objectives

1. To examine the abbreviation of standard format of PCIT (Abbreviated Intensive) diluted its effectiveness in treating noncompliance behaviour among ADHD preschool children.
2. To examine the effect of behavioural parent training (Abbreviated Intensive PCIT) on parent's acquisitions of CDI and PDI parenting skills.
3. *To investigate the level of parent's satisfaction with behavioural parent training (Abbreviated Intensive PCIT) in treating noncompliance behaviour among ADHD preschool children.*

3. Methodology

3.1 Research Respondents

There were six parent-child dyads included in the study. These children were all boys who aged 6-year old attended the Special Integrated Preschool Education under MOE in Selangor, Malaysia and they had been certified by medical doctor as having ADHD. These children were recruited from the population of 28 preschool children with ADHD as registered with Ministry of Health (MOH) in 2012 (Tin, 2013). Researcher ruled out the inclusion and exclusion criteria for parent-child dyads as the following:

3.1.1 Parent-Child Dyads Inclusion Criteria

The inclusion criteria for parent-child dyads included: 1) child's ages between five and six, 2) the child was certified by medical doctor as having ADHD, 3) living with participating parents, 4) at least >131 scores of ECBI and 5) the parent must be able to be contacted by therapist via telephone on a weekly basis.

3.1.2 Parents-Child Dyads Exclusion Criteria

The exclusion criteria for parent-child dyads included: 1) parent or child has been diagnosed with a major significant cognitive or development delay, 2) parent or child has been diagnosed with a major psychiatric illness or medical condition that impairs judgment, 3) parent unable to communicate via telephone on a weekly basis and 4) parent or child received other psychosocial treatments.

3.2 Research Design

A-B single-case experimental design was applied to systematically test the effect of PCIT throughout four different phases: 1) Baseline (A1), 2) Intensive Treatment (B-IT), 3) Maintenance Treatment (B-MT) and 4) Follow-up (F1). The same respondents and instruments were used repeatedly for the pre-test and post-test measurements to investigate the efficacy of behavioural parent training of PCIT on noncompliance behaviours among ADHD preschool children.

3.3 Research Instruments

For the purpose of the study, there were five main instruments used: ADHD Checklist, ECBI, DPO, DPICS-III and TAI.

3.3.1 ADHD Checklist

The diagnostic interviews help to determine the degree to which a child's behavioural symptoms are consistent with DSM-5 (APA, 2013). The three presentations of ADHD in children as defined by the DSM-5 may vary considerably are ADHD-I, ADHD-HI and ADHD-C.

3.3.2 ECBI (Eyberg Child Behaviour Inventory)

A 36-item parent-rating scale designed to measure disruptive behaviour in children between 2 and 16 years of age (Eyberg & Pincus, 1999). The Intensity Scale was only used in this study. The raw scores cut-off for clinical significance is ≥ 131 and the T-scores cut-off for clinical significance is ≥ 60 . The higher scores (over clinical cut-off) reflect a greater concern about the child's disruptive behaviours.

3.3.3 DPO (Daily Parent Observation)

A checklist adapted from Lewis (2010) which helps parents to identify the most observable and problematic child behaviours that occurring daily.

3.3.4 DPICS-III (Dyadic Parent-Child Interaction Coding System-III)

A behavioural observation system designed to code the important parent-child interaction and behaviour patterns associated with ineffective parenting styles and disruptive child behaviour (Eyberg, Nelson, Duke & Boggs, 2009). The DPICS-III observations were conducted during the standard parent-child interaction situations, child-lead play (CLP) and parent-lead play (PLP) in 5-minute coding session of each situation. For the purpose of this study, two dependent variables have been coded: i) parent's verbalisations of Do and Don't Skills during CLP and 2) child compliance behaviours toward parental commands during PLP.

3.3.5 TAI (Therapy Attitude Inventory)

A 10-item self-report measures parent's satisfaction with the treatment as well as the satisfaction with the child behaviour changes following the treatment (Hembree-Kigin, & McNeil, 1995). Participants rate their satisfaction on a 5-point scale from 1 indicating low satisfaction to 5 indicating high satisfaction.

3.4 Data Collection

3.4.1 Institutional Approval

The main official ethical approval was obtained from MOE under Educational Research and Planning Division (ERAS) and District Education Office (DEO) in Selangor. Subsequently, a contact with the preschool authority was made in order to ensure the study permitted to be conducted and understood its purposes. The contacts were established with the respective headmasters and teachers to discuss the list for affected children and their parents along with the date and time to meet. Then, researcher asked for permission to meet parents and their child at home before beginning of the clinical interview.

3.4.2 Abbreviated Intensive Procedure

Based on Abbreviated Intensive PCIT format, this study involved one baseline (A₁), two intervention phases: B-IT and B-MT and one follow-up (F₁).

In this study, all dyads began the baseline at the same time. The ECBI and DPO scores for all parent-child dyads showed stable baseline scores at least for three days. This was supported by Lewis (2010) that an acceptable baseline is defined as at least three days in a row when the child showed the similar scores at least three times that did not display a consistent downward trend (decline of greater than 5%).

During B-IT, 2-hour intervention sessions were conducted for five consecutive weeks at the parent-child dyads' home. Following the completion of B-IT, parents continued to be assessed in B-MT for another six weeks. The face-to-face sessions were alternated with 1-month weekly of 30-minute telephone consultations. The treatment was officially completed after parents involved in two Booster sessions (1 ½ hour) at the conclusion of B-MT in weeks five and six. Then, parents required completing ECBI and DPO assessments for one month until the researcher and her two coders returned to each dyad's home for the final assessment. Overall, there were seven sessions of Abbreviated Intensive PCIT conducted for each parent-child dyad (refer Table 1).

Table 1: Abbreviated Intensive PCIT Protocol

Week	Session	Parenting Skills	Intervention Process	Assessment
A₁ (3 days)				
1	-	-	Semi-structured interview	ADHD Checklist, ECBI, DPO, DPICS-III
B-IT (5 weeks)				
2	1	CDI	Coaching and Coding CDI skills	ECBI, DPO, DPICS-III
3	2	PDI	Coaching and Coding PDI skills	ECBI, DPO, DPICS-III
4	3	CDI + PDI	Coaching and Coding CDI and PDI skills	ECBI, DPO, DPICS-III
5	4	CDI + PDI	Coaching and Coding CDI and PDI skills	ECBI, DPO, DPICS-III
6	5	CDI + PDI	Coaching and Coding CDI and PDI skills	ECBI, DPO, DPICS-III
B-MT (6 weeks)				
7-10	1 month	-	Telephone Consultation	ECBI, DPO
11	6	CDI + PDI	Coaching and Coding CDI and PDI skills	ECBI, DPO, DPICS-III
12	7	CDI + PDI	Coaching and Coding CDI and PDI skills	ECBI, DPO, DPICS-III, TAI

F ₁ (5 weeks)				
13-16	1 month	-	Parents completing F ₁ assessments	ECBI, DPO
17	1 day	-	Coding CDI and PDI skills	ECBI, DPO, DPICS-III, TAI

3.4.3 Dependent Measures and Mastery Criteria

There were two dependent variables have been collected: (i) the improvement in parent's verbalisation of Do Skills and Don't Skills and (ii) child compliance behaviour toward parental commands were measured repeatedly to study the effect of PCIT on the pattern of changes in child's noncompliance behaviour. The direct observations of dyadic interactions were recorded using videotapes. Parent-child dyads were assessed on three occasions: 1) pre-intervention (A₁), 2) post-intervention after B-IT and B-MT and 3) post-intervention after one month treatment completed (F₁). DPICS-III observation in this study conducted at respondents' home but still equipped with similar materials such as one table, two chairs, one time-out chairs and toys. During the DPICS assessments, it was only one child and one parent (either father or mother) was allowed in the treatment when conducting the DPICS-III. Each parent was coached using a wireless earphone device. In this way, the child hears the initial directions from the parent rather than from the therapist (Eyberg et al., 2009).

3.4.4 Inter-rater Reliability

In order to establish the coding reliability of DPICS-III, two postgraduate students were trained to reach 80% accuracy with a criterion tape coded (Eyberg et al., 2009). The training involved direct instruction in the specific observation procedure and practice in coding parent-child interaction displayed in video of actual home behaviour. These data were used to calculate the specific parent and child behaviours using the intra-class correlation coefficient (ICC) based on benchmark scale developed by Gouttebauge, Wind, Kuijer, Sluiter and Frings-Dresen (2005). The ICC value of (91% to 100%) indicates a high agreement level, while ranges of values (75% to 90%) indicates a moderate level of agreement and (74% and below) indicates low agreement levels respectively. It was found that, the coding system for DPICS-III has good inter-rater reliabilities that ranged from .90 to .95 (Mean=.92) for parent behaviour codes and .91 to .92 (Mean= .91) for child behaviour codes. The validity of the DPICS-III has been demonstrated in various studies. For example, it has correctly classified 100% of normal families and 85% of treatment families (Robinson & Eyberg, 1981).

3.4.5 CDI Mastery Criteria

In CDI parents were taught the basic skills in recognising their children's positive qualities and coached in play time sessions to apply positive attention while ignoring negative behaviours (Harwood & Eyberg, 2006). There were two categories of parent's verbalisations observed during CDI parenting skills: the Do Skills and Don't Skills. The Do Skills include Labelled Praises (LP), Reflections (RF), and Behavioural Descriptions (BD). The Don't Skills include Information Questions (IQ), Descriptive Question (DQ), Indirect Command (IC), Direct Command (DC) and Negative Talk (NTA). The mastery criteria in CDI, parents must demonstrate at least 10 LP, 10 RF, and 10 BD, and not more than 3 totals IQ or DQ, IC or DC, and NTA (Eyberg, 1999). Praise, description and reflection are likely to lead to better communication between parent and children. It demonstrates parents' understanding and support of their children. Questioning, commands and negative talks are unlikely to be

conducive to positive parent-child relationship and interaction. Children may be more reluctant to communicate if the parent questions and criticises their behaviour frequently.

3.4.6 PDI Mastery Criteria

In PDI parents were taught the skills in how to direct their children and they were coached in how to provide safe and effective discipline in response to noncompliance behaviours (Harwood & Eyberg, 2006). The parental commands must be effective, direct, positively stated and in single command that provide an opportunity for the child to comply (Urquiza, Zebell, Timmer, McGrath, & Whitten, 2011). The mastery criteria for PDI at least 75% of commands must be obeyed by the child (Eyberg, 1999). In this study, due to time constraint of 5-minute, parents were asked to give the total of 12 commands (Lewis, 2010). Thus, at least nine commands in a form of behaviour application must be obeyed by the child during the coding session.

4. Results

A descriptive analysis was used to explore parent-child dyads including age, gender, sibling, ADHD presentation, parents' age, level of education and yearly incomes.

4.1 Demographic Background

Based on ADHD checklist DSM-5, there were three children diagnosed with ADHD-C, two children with ADHD-HI, and one child with ADHD-I. The ADHD presentation data of these six children had been approved by medical doctors and clinical psychologist (refer to Table 2).

Table 2: Child Respondents' Demographic Background

Dyads	Age	Gender	Sibling	ADHD Type
1	6	Boy	No sibling	ADHD-C
2	6	Boy	1 from 3 siblings	ADHD-C
3	6	Boy	No sibling	ADHD-C
4	6	Boy	2 from 3 siblings	ADHD-HI
5	6	Boy	No sibling	ADHD-HI
6	6	Boy	2 from 2 siblings	ADHD-I

The average parents' age was between 25 to 41 years old. Regarding the education level, most parents have a minimum of Malaysia Certificate of Education (SPM), but four of them have diploma. The yearly household income for each family was between RM25, 000 to RM45, 000. The data showed that, both parents of Dyad 6 have higher education level and yearly household income (refer to Table 3).

Table 3: Parent Respondents' Demographic Background

Dyads	Age		Education		Yearly Household Income
	Father	Mother	Father	Mother	
1	28	26	SPM	SPM	RM25,000
2	33	30	Diploma	SPM	RM35,000
3	36	28	SPM	Diploma	RM40,000
4	41	36	SPM	SPM	RM40,000
5	28	25	SPM	SPM	RM30,000
6	35	33	Diploma	Diploma	RM45,000

4.2 Research Questions

1. What is the effect of Abbreviated Intensive PCIT on noncompliance behaviours among ADHD preschool children?

In terms of the first research question and objective on the effectiveness of Abbreviated Intensive PCIT in treating noncompliance behaviours among ADHD preschool children, there were two assessments ECBI and DPO employed to measure the effect of treatment on pattern of changes in noncompliance behaviour among those children. The consistent treatment gains across dyads were also reflected in parent ratings of child noncompliance behaviours. The findings indicated that Abbreviated Intensive PCIT was effective in reducing noncompliance behaviour among ADHD preschool children in which their mean ECBI and DPO scores during the F₁ assessment remained lower than their respective mean ECBI and DPO scores during Baseline (A₁) (refer to Figures 1 and 2).

Figure 1: Mean Comparison in ECBI Scores between A₁, B-IT, B-MT and F₁

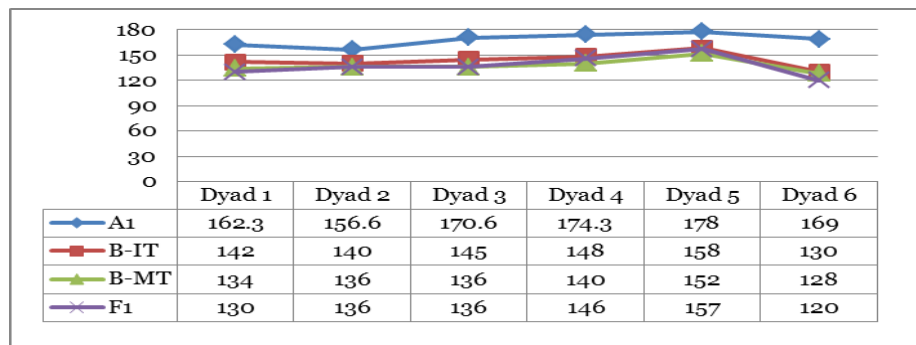
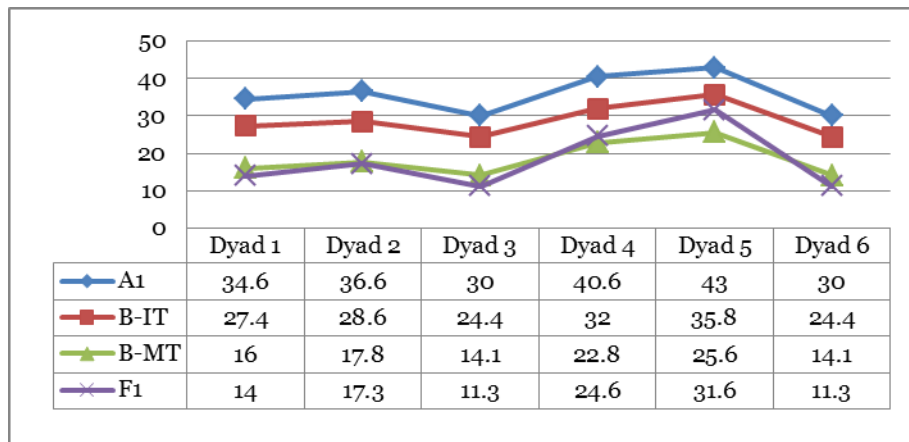


Figure 2: Mean Comparison in DPO Scores between A₁, B-IT, B-MT and F₁



2. What is the effect of the Abbreviated Intensive PCIT on parents' acquisition of CDI and PDI parenting skills taught over the course of treatment?

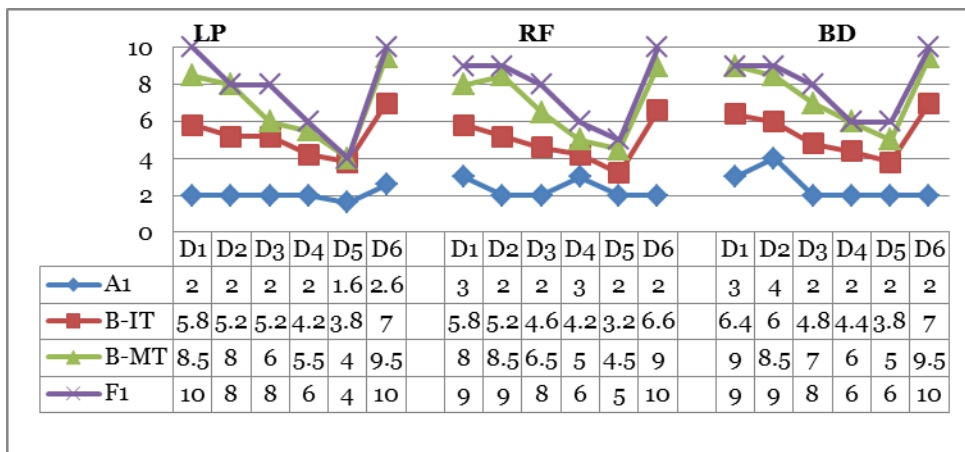
With regard to the second research question and objective on the effect of Abbreviated Intensive PCIT on parents' acquisition of CDI and PDI parenting skills, results indicated that the intervention was effective in improving parent's CDI and PDI parenting skills. The DPICS-III observational measurement reflected the improvement in parents' verbalisation and child compliance behaviours toward parental commands.

First, Abbreviated Intensive PCIT was effective in increasing parents' proficiency in using positive verbalisation and reducing their negative verbalisation when interacting with their child during CLP. The findings indicated that although treatment gains varied between dyads, however, all parents displayed an improvement in their use of labelled praise, descriptive and reflective statements when interacting with their child throughout the treatment phases. Parent of Dyad 6 was the only who achieved the mastery criteria of CDI Do Skills of at least (10 LP, 10 BD, 10 RF) and Don't Skills of at least (3 IQ/DQ, 3 IC/DC and 3 NTA).

Second, Abbreviated Intensive PCIT was effective in increasing parents' proficiency in giving effective commands when interacting with their child during PLP. The current findings indicated that although treatment gains varied between dyads, however, all children's compliance behaviour towards parental commands increased throughout the treatment phases. Thus, it was showed that the way how parents gave the commands provided the opportunity for children to improve their compliance behaviours. Parent of Dyad 6 was the only who achieved the mastery criteria of PDI skills of at least 9 commands have been obeyed by the child.

These results consistent with the statement made by Wagner and McNeil (2008) that child compliance with a command is immediately followed by a labelled praise from the parent, thus, positively reinforcing the compliance. Overall, the findings indicated that parents were improved in CDI and PDI parenting skills by remained increase in their scores from baseline to follow-up (refer to Figures 3 and 4).

Figure 3: Mean Comparison in CDI Scores between A₁, B-IT, B-MT and F₁



CDI Parenting Skills: Do Skills

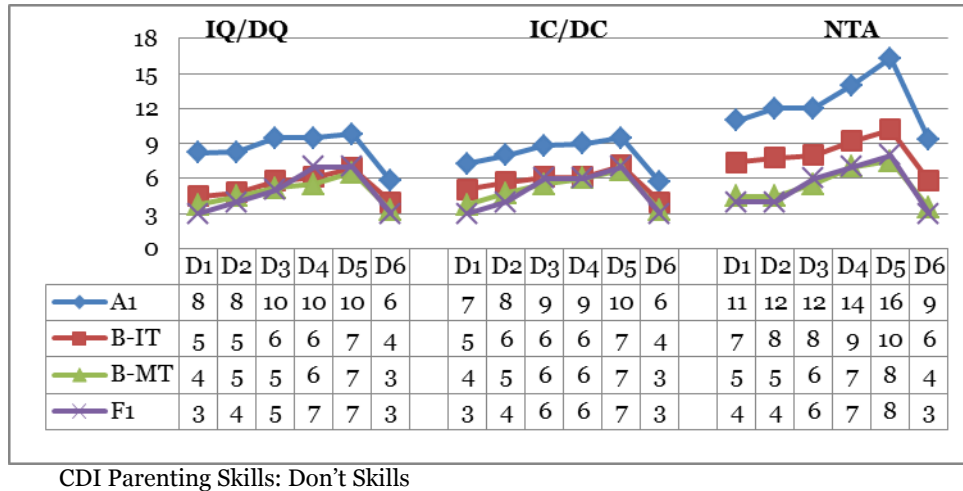
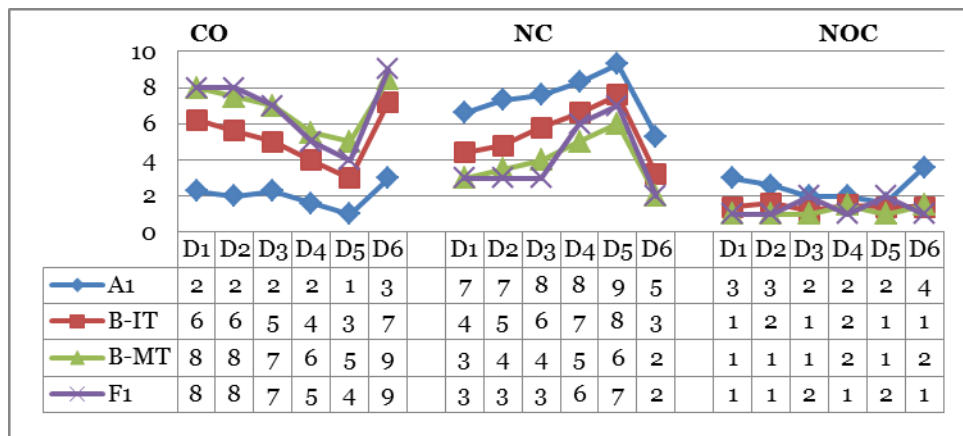


Figure 4: Mean Comparison in PDI Scores between A₁, B-IT, B-MT and F₁



3. What is the parents' level of satisfaction toward Abbreviated Intensive PCIT in treating noncompliance behaviour among ADHD preschool children?

With regard to the third research question and objective about parents' level of satisfaction with Abbreviated Intensive PCIT in treating noncompliance behaviour among ADHD preschool children, the results indicated that most parents have high level of satisfaction toward the intervention ($Mean = >40$). The high levels of parent's satisfaction with the intervention parallels with the declining of parents' ECBI and DPO ratings reported between pre-test and post-test outcomes. These outcomes suggested that greater satisfaction was related to greater efficacy of Abbreviated Intensive PCIT in treating noncompliance behaviour among those children. However, of all dyads that completed B-MT and F₁ of TAI assessment, parent of Dyad 5 ($Mean = 35$) remained his rating with moderate level of satisfaction.

5. Discussion

5.1 *Effects of Abbreviated Intensive PCIT*

The qualitative data findings of this study seemed to support such an explanation by providing evidence congruence with the quantitative data. Based on the semi-structured interview, parents reported more positive changes in parent-child relationship, positive attitudes toward their child, better communication when interacting with the child and found that the Abbreviated Intensive PCIT content, delivery format and therapist very helpful. Moreover, parent of Dyad 6 was the only who achieved for both CDI and PDI mastery criteria. The finding was supported the statement made by APA (2013) in which children with ADHD-HI show more aggressive behaviours, while children with ADHD-I tend to be more withdrawn and they are less aggressive than children with ADHD-HI or ADHD-C. The child of Dyad 6 who had ADHD-I showed some behaviour indicative of inattention such as disorganisation, forgetfulness, difficulty persevering on a task even when child tries, easily distracted, appearing as if the child is not listening, and deficits in his attention capacity and sustained attention particularly for repetitive, structured, and uninteresting tasks. The child's scores on his ECBI and DPO showed that his noncompliance behaviours were less than the other children even before and after the treatment. During the treatment, the child also showed less aggressive but more in inattentive problems. In addition, parent of Dyad 6 was exhibited her excitement in participating in the treatment and concentrated in her efforts to improve her parenting skills more than other parent respondents.

5.2 *Limitation*

The ability to generalise the results may be limited to a small sub-set of the general population. These children were recruited from the population of 28 ADHD preschool children who registered with MOH in 2012 (Tin, 2013). All participating children were boys and comprised of only Malay children and their parents. Noncompliance behaviour is one of the most common disruptive behaviours among ADHD children (Hinshaw & Lee, 2003; Swanson, 2003). Thus, the Abbreviated Intensive PCIT was applied to examine its efficacy on noncompliance behaviour among those children. Consequently, the effect of this type of behavioural parent training for other groups of children and other types of disruptive behaviours were unknown.

5.3 *Cultural Issues*

Based on the research findings, there were two main cultural issues raised and related to the use of PCIT in Malay society.

First, although all parents showed improvement in increasing their positive verbalisations by praised child's appropriate behaviour and positive in their reflective or declarative statements, however, some of the parent respondents were not happy to use praise as a technique for increasing their child compliance behaviour. Some of the parents thought that praise if continuously given, it might spoil the child. This finding was consistent with the study conducted by Tsang, Leung and Tung Wah Group of Hospitals (2007) in which in Chinese culture, too much praises might spoil the children. Furthermore, some parents have a tendency to lead and control the child during CLP situation. This issue might stem from Asian values such as parental authority, parental control and overprotection (Blair & Qian, 1998).

Second, some parents found the technique of active ignoring in CDI skills was difficult, especially during their children's misbehaviour in public. In Asian society, a child's misbehaviour is thought to reflect the inadequacy of the parents in disciplining their child (Tsang & Leung, 2007). Parents reported that, they tried to end such misbehaviour as quickly as possible using negative talks or physical punishment. This finding was consistent with the study conducted by Tsang et al. (2007) in which when children misbehave or have more serious behaviour problems, such as outbursts and tantrums, then, parents react with anger and frustration or harsh limits.

5.4 *Implication*

This study showed that behavioural parent training has a significant impact on parents' acquisition of effective parenting skills. Throughout parent training, parents improved their attitude and increased in their knowledge and skills in managing their child's disruptive behaviour. The abbreviation of the standard format of PCIT (Abbreviated Intensive) has been found to be effective in reducing noncompliance behaviour among ADHD children. The combination of play and behavioural therapies is the best approach to engage between parent and child in communication in order to help children with mental health and behavioural problems because of their verbal limitations. The finding of this study can contribute to the family counselling and therapy practices in Malaysia. This kind of behavioural parent training can fit with the child's requirement to help parents to deal with their affected children. Children, in turn, respond to these healthier relationships and interactions. As a result, children treated using this parent-child therapy showed significant reductions in behaviour problems at home and at school. This is parallel with the Malaysian Board of Counsellors (MBC) statement that, there is lack of a coherent theoretical framework for the practice of clinical management and service in school counselling. For future growth to take place, school counsellors need to incorporate various therapeutic approaches into their practice techniques, for example, to include family counselling and therapy (See & Ng, 2010). Therefore, the empirical findings from this study are expected to contribute toward the children mental health counselling profession in Malaysia.

5.5 *Suggestions for Further Improvement*

Several aspects were identified and suggested some impressions that this behavioural parent training could enhance some improvement in its implementation.

First, most parents asked for including their extended family members especially their spouse into the treatment. The PCIT intervention process emphasised the child behaviour problems only in a parent-child context (Urquiza et al., 2011). However, parents reported that in rearing the problematic child, they need mutual cooperation with their spouses. That is why some parents complained that they could not achieve the CDI and PDI mastery criteria because was not easy to manage their child alone without their spouses. Thus, the extended family members must be included in this treatment.

Second, some parents suggested that in the beginning of each treatment, therapist can begin the session with Islamic religious education. This is include the child to know and love Allah, the Prophet Muhammad (PBUH) and Islam. Some parents recommended that a very soft form of physically punished (beaten) can be applied as a last resort if the child do not correct the wrong behaviour after third times the gentle instruction does not result in the child. In relation

to no interaction with parents during the time-out, this session can be added with the time for child to listen to simple surah from Al-Quran.

Third, most parents agreed that it is very important to carefully select the toys that can be used during play therapy in both CLP and PLP sessions. Parents recommended the use of toys that represent Malaysian and Muslim people, such as the toys wearing Muslim dress instead of using the animal toys. For example, Mr. Bear has been used in the study as it was one of the original types of toy used in PCIT. In addition, some parents recommended that a creative and fun Islamic game such as “Alif, Ba, Ta” (Arabic alphabet letters) can be used during the play therapy session. Instead of playing, the child has an opportunity to learn Islamic value in a playful manner.

6. Conclusion

The PCIT has been shown to be an effective approach to improve disruptive behaviours among ADHD children (Abrahamse, Junger, Chavannes, Coelman, Boer, & Lindauer, 2012; Lyon & Budd, 2010). Similar results came from studies to explore the effectiveness of PCIT as a behavioural parent training in places such as Asian ethnic group (Tsang & Leung, 2007) and Latino and Mexican Americans (Matos, Torres, Santiago, Jurado, & Rodriguez, 2006; McCabe, Yeh, Lau & Argote, 2012). As a growing practice in Malaysia, behavioural parent training like Abbreviated Intensive PCIT is essential for helping children with disruptive behavioural disorders. This intervention offers fewer intervention sessions (7-session) than the standard PCIT ranges from 12 to 16 sessions. A meta-analytic study has demonstrated that early intervention with fewer treatment sessions is more effective than those with a higher number of treatment sessions (Bakermans-Kranenburg, Van IJzendoorn, & Juffer, 2003). Furthermore, this study demonstrated that Abbreviated Intensive PCIT can significantly help parents to improve their positive parenting practices by increasing parents’ proficiency in using praise, descriptive and reflective statements and in giving effective in a single stated of commands when interact with their child. PCIT also help parents to reduce inappropriate parenting practices by decreased in use of criticisms, negative talks, commands and too much questions. Another benefit of this study was to provide valuable information and guidelines among professional counselling and mental health practitioners in terms of future designing of family-centred treatment approach that adaptable to Malaysian culture. Therefore, parenting module as one of the early childhood interventions that based on the PCIT was recommended to improve positive parenting practices in rearing the problematic children.

References

- [1] Abikoff, H. 1991. Cognitive Training in ADHD Children: Less to It than Meets the Eye, *Journal of Learning Disabilities*, 24 (4), 205-209.
- [2] Abrahamse, M.E., Junger, M., Chavannes, E.L., Coelman, F.J., Boer, F. & Lindauer, R.J. 2012. Parent-Child Interaction Therapy for Preschool Children with Disruptive Behaviour Problems in the Netherlands, *Child Adolescent Psychiatry Mental Health*, 6 (1), 1-9.
- [3] American Psychiatric Association 2013. *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*, American Psychiatric Association, Washington, D.C.
- [4] Barkley, R. 2012. *The Important Role of Executive Functioning and Self-Regulation in ADHD*. Available from: <http://www.russellbarkley.org/content/ADHD_EF_and_SR.pdf> [2 April 2014].
- [5] Bakermans-Kranenburg, M. J., Van IJzendoorn, M. H., & Juffer, F. 2003. Less is More: Meta-Analyses of

Sensitivity and Attachment Interventions in Early Childhood. *Psychological Bulletin*, 129 (2), 195–215.

- [6] Beauchaine, T. P., Hinshaw, S. P., & Pang, K. C. 2010. Comorbidity of Attention-Deficit/Hyperactivity Disorder and Conduct Disorder: Biological, Environmental, and Developmental Mechanisms, *Clinical Psychology: Science and Practice*, 17 (4), 327–336.
- [7] Blair, S.L. & Qian, Z. 1998. Family and Asian Students' Educational Performance: A Consideration of Diversity, *Journal of Family Issues*, 19 (4), 355-374.
- [8] Eyberg, S.M., Nelson, M.M., & Boggs, S.R. 2008. Evidence-Based Psychosocial Treatments for Children and Adolescents with Disruptive Behaviour, *Journal Clinical Child Adolescent Psychology*, 37 (1), 215–237.
- [9] Eyberg, S. M. 1999. *PCIT Treatment Manual: Session Outlines*. Unpublished Manuscript, University of Florida.
- [10] Eyberg, S.M., & Pincus, D. 1999. *Eyberg Child Behaviour Inventory and Sutter-Eyberg Student Behaviour Inventory-Revised: Professional Manual*, Psychological Assessment Resources, Odessa, FL.
- [11] Eyberg, S.M., & Boggs, S.R. 1989. Parent Training for Oppositional-Defiant Preschoolers. In C. E. Schaefer & J. M. Briesmeister (Eds.), *Handbook of Parent Training: Parents as Co-Therapists for Children's Behaviour Problems*, New York: Wiley, pp. 105–132.
- [12] Eyberg, S.M, Nelson, M.M., Duke, M., & Boggs, S.R. 2009. *Manual for the Dyadic Parent-Child Interaction Coding System (3rd ed.): Version 3.07*, Available from: <<http://www.pcit.org>> [28 January 2013].
- [13] Gouttebauge, V., Wind, H., Kuijter, P. P., Sluiter, J. K., & Frings-Dresen, M. H. 2005. Intra and Interrater Reliability of the Ergo-Kit Functional Capacity Evaluation Method in Adults without Musculoskeletal Complaints, *Archives of Physical Medicine and Rehabilitation*, 86 (12), 2354-2360.
- [14] Gomez, R., & Hafetz, N. 2011. DSM-IV ADHD: Prevalence Based on Parent and Teacher Ratings of Malaysian Primary School Children. *Asian Journal of Psychiatry*, 4 (1), 41-44.
- [15] Graziano, P., Bagner, D., Slavec, J., Rodríguez, G., Kent, K., Babinski, D., Derefinko, K., & Pasalich, D. 2014. Feasibility of Providing Intensive Parent-Child Interaction Therapy (I-PCIT): Results from an Open Trial, *Journal of Psychopathology and Behavioural Assessment*, Available from: doi: 0.1007/s10862-014-9435-0 [25 June 2015].
- [16] Hanna, F.J., Hanna, C.A., & Keys, S.G. 1999. Fifty Strategies for Counselling Defiant, Aggressive Adolescents: Reaching, Accepting, and Relating, *Journal of Counselling and Development*, 77 (4), 395-404.
- [17] Harwood, M.D., & Eyberg, S.M. 2006. Child-Directed Interaction: Prediction of Change in Impaired Mother-Child Functioning, *Journal of Abnormal Child Psychology*, 34 (3), 335-347.
- [18] Hembree-Kigin, T. L., & McNeil, C. B. 1995. *Parent-Child Interaction Therapy*, New York, Plenum Press.
- [19] Hinshaw, S.P., & Lee, S.S. 2003. Conduct and Oppositional Defiant Disorders. In E.J. Mash & R.J. Barkley (Eds.), *Child Psychopathology (2nd ed.)*, New York: Guilford, pp. 144-198.
- [20] Marshall, R.M., Hynd, G.W., Handwerk, M.J. & Hall, J. 1997. Academic Underachievement in ADHD Subtypes. *Journal of Learning Disabilities*, 30 (6), 635-642.
- [21] Lewis, C.A. 2010. *Five Day Abbreviated Intensive Parent-Child Interaction Therapy for Families with Preschool-Age Children with Disruptive Behaviour Problems*, Unpublished manuscript. University of Florida.
- [22] Lyon, A. R., & Budd, K. S. 2010. A Community Mental Health Implementation of Parent-Child Interaction Therapy (PCIT). *Journal of Child and Family Studies*, 19 (5), 654–668.
- [23] Matos et al. 2006; Matos, M., Torres, R., Santiago, R., Jurado, M., & Rodriguez, I. 2006. Adaptation of Parent-Child Interaction Therapy for Puerto Rican Families: A Preliminary Study, *Family Process*, 45 (2), 205–222.
- [24] McCabe, K.M., Yeh, M., Lau, A.S., & Argote, C.B. 2012. Parent-Child Interaction Therapy for Mexican Americans:

Follow-up Results of a Pilot Randomised Clinical Trial, *Behaviour Therapy*, 43 (3), 606-618.

- [25] McNeil, C., & Hembree-Kigin, T. 2010. *Parent-Child Interaction Therapy (2nd ed.)*, New York, Springer.
- [26] See, C. M., & Ng, K. 2010. Counselling in Malaysia: History, Current Status, and Future Trends, *Journal of Counseling & Development*, 88 (1), 18–22.
- [27] Neary, E.M., & Eyberg, S.M. 2002. Management of Disruptive Behaviour in Young Children, *Infants and Young Children*, 14 (4), 53-67.
- [28] 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.
- [29] Parker, H.C. 2002. *Problem Solver Guide for Students with ADHD: Ready-to-Use Interventions for Elementary and Secondary Students with ADHD*, Impact Publications, Plantation, FL.
- [30] Pelham, W.E. Jr. & Fabiano, G.A. 2008. Evidence-Based Psychosocial Treatments for Attention-Deficit/Hyperactivity Disorder, *Journal Clinical Child Adolescent Psychology*, 37 (1), 184–214.
- [31] Robinson, E., & Eyberg, S.M. 1981. The Dyadic Parent-Child Interaction Coding System: Standardisation and Validation, *Journal of Consulting and Clinical Psychology*, 49 (2), 245-250.
- [32] Scott S. 2002. Parent Training Programmes, In: M. Rutter & E. Taylor (Eds), *Child and Adolescent Psychiatry, (4th ed.)*, Oxford: Blackwell Science, pp. 949-967.
- [33] Solomon, M., Ono, M., Timmer, S., & Goodlin-Jones, B. (2008). The Effectiveness of Parent–Child Interaction Therapy for Families of Children on the Autism Spectrum, *Journal of Autism and Developmental Disorders*, 38 (9), 1767–1776.
- [34] Supiah, S. & Geoff, L. 2010. Preschool Children with Attention Deficit Hyperactivity Disorder (ADHD) in Inclusive Settings: Challenging but Not Problematic, *Pertanika Journal of Social Science and Humanities*, 18 (1), 115-132.
- [35] Swanson, J. 2003. Compliance with Stimulants for Attention-Deficit/Hyperactivity Disorder: Issues and Approaches for Improvement, *CNS Drugs*, 17 (2), 117-131.
- [36] Teoh, H.J. & Kasmini, K. 2000. Project on Interpersonal and Familial Aspects of Children and Adolescent Mental Health, (IRPA Project No: 06-02-02-0097).
- [37] Tin, C.S. (2013). *Children with Disabilities in Malaysia: Mapping the Policies, Programmes, Interventions and Stakeholders*, Family Health Development Division, Ministry of Health Malaysia.
- [38] Toh, C. L., Ding, L. M., Peng, R., Maniam, T., Lim, T. O., Abdullah, A., & Sararaks, S. 2006. *Psychiatric Morbidity in Children and Adolescents in National Health and Morbidity Survey III*, Ministry of Health, Malaysia.
- [39] Tsang, S., Leung, C. & Tung Wah Group of Hospitals 2007. Research Report on the Outcome and Process Evaluation of the Parent-child Interaction Therapy (PCIT) in Treating Families with Children with Behaviour Problems in Hong Kong. Available from: < http://pcit.tungwahcsd.org/pcit_report.pdf > [1 September 2014].
- [40] Urquiza, A., Zebell, N., Timmer, S., McGrath, J., & Whitten, L. 2011. *Course of Treatment Manual for PCIT-TC*, Unpublished Manuscript.
- [41] Wagner, S. M., & McNeil, C. B. 2008. Parent-Child Interaction Therapy for ADHD: A Conceptual Overview and Critical Literature Review, *Child & Family Behaviour Therapy*, 30 (3), 231-256.