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PARENT-CHILD INTERACTION THERAPY: A LITERATURE REVIEW ON ITS EFFECTIVENESS FOR CHILDREN WITH AUTISM SPECTRUM DISORDER (ASD)

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Abstract: Autism Spectrum Disorder (ASD) affects children and their learning in a variety of ways. ASD is a developmental disorder that is marked by profound deficits in social, language, and cognitive abilities. The core features of ASD are areas in which difficulties can lead to feelings of frustration, confusion, anxiety or lack of control, resulting in behavioural responses. This article offers an overview of the literature, focusing on the effectiveness of Parent-Child Interaction Therapy (PCIT) which used to improve the relationship between parent-children and to reduce noncompliance behaviour in children with ASD. The PCIT is an empirically-supported treatment for conduct-disordered for young children aged two to seven that highlights on improving the quality of the relationship between parents and child and changing inappropriate pattern of parent-child interaction. Early relationships between parents and children have powerful impacts on children's behaviour and emotional development. When parents are responsive and sensitive to child's cues, they contribute to the coordinated back and forth of interaction with the child. This kind of interaction helps children develop self-sense and emotional regulation skills such as self-control and self-calming. Furthermore, in order to help young children to develop lifelong motivation in their self, parents are encouraged to participate in everyday learning and playing activities. Therefore, identifying the most effective intervention parenting programmes for enhancing and rebuilding parent-child relationships through teaching parent the skills necessary for coping with noncompliance behaviour in young children with ASD is crucially important. Overall, the findings of this study demonstrate the potential of PCIT as an early intervention to improve the behavioural functional outcomes of preschool children with ASD.

Keyword: Parent-Child Interaction Therapy (PCIT), Autism Spectrum Disorder (ASD)

Overview Noncompliance Behaviour in Preschool Children with Autism Spectrum Disorder (ASD)

Autism is referred to as a spectrum disorder, meaning that the symptoms can occur in any combination and with varying degrees of severity. Autism Spectrum Disorder (ASD) is a type of disruptive behavior disorder that usually appears in early childhood. It is a neurobiological developmental disorder that typically appears during the first three years of life. Autism falls under the Pervasive Developmental Disorders (POD) category in the Diagnostic and Statistical Manual of Mental Disorders (diagnostic criteria 299.00). Under the POD or Autism Spectrum, there are a variety of subtypes and DSM-5 made some key changes to ASD diagnosis. There is now a single diagnosis of ASD that replaces the different subdivisions: Autistic Disorder, Asperger's Disorder and Pervasive Developmental Disorder-Not Otherwise Specified. According to the DSM-5, three core features of Autism must be present for a diagnosis to be made: social impairment, verbal or nonverbal impairment, and repetitive patterns of behaviors (American Psychiatric Association, 2013).

Noncompliance behaviors may reflect a child's disruptive behavior such as rebellion, difficulty in settling into a task, tendency to become over-aroused, easily frustrated, and impulsive behavior often result in a wide variety of non-purposeful behaviors that are clearly disrupting others (Cohen, 2012). Noncompliance behaviors defined as when the child does not perform or complete something that parents have asked, when the child acts defiant when told to do something, when the child refuses to do until threatened with punishment, and when the child ignore or argue with something parents asked to do (Barkley, 2012; Lewis, 2010). Approximately 60% of young children with ASD tend to develop oppositional disorder characterised by noncompliance behaviour (Parker, Vannest, & Brown, 2009). Noncompliance behaviour is one of the most common disruptive behaviour conditions among children who diagnosed with ASD (Hinshaw & Lee, 2003). As reported by Goldstein, Harvey, and Friedman-Weieneth (2007), there were 50% of children with ASD experience noncompliance behaviour. When examining the failure of a child to complete a given instruction even after educated and trained him or her, the child still noncompliance. According to Barkley (2012), the term noncompliance behaviour refers to three categories of child behaviour. First, a child is unable to perform behaviours requested by parents within a reasonable time 15-second after a command given.

Second, the child is unable to sustain compliance to a direction from parents until the requirements stipulated in the command have been fulfilled. It may consider this behaviour category as a form of attention span or sustained attention to on-tasks behaviour. Third, the child is unable to follow previously taught rules of conduct in any situations which parents or teachers consider to be violation. The examples of the behaviour such as, leaving one's table in class, running off in a hypermarket without parents' permission, lying, stealing, hitting, kicking, biting or aggressing against other people.

Moreover, according to Barkley (2012) the term defiance can also be used for many instances of noncompliance behaviour where the child not only fails to obey a command or rule, but also displays active verbal or physical resistance toward the commands. This is an active resistance to command rather than a passive one as might be conveyed by the term noncompliance behaviour. For example, when parent attempts to impose compliance with a directive on the child, the child will engage in verbal refusal, temper outbursts, and even physically aggressing against the parent. The examples of noncompliance behaviours can be referred in Table 1. All these behaviours can be considered as belong to a larger class of noncompliance behaviour. This inter-related form of behaviour has also been termed as disruptive behaviour disorders that include conduct disorder, social aggression, hostile-defiance behaviour, and externalising behaviour problems. Some of these behaviours are direct efforts of the child to avoid the imposition of the command (Patterson, 1982).

Table 1: Examples of Noncompliance Behaviours

Yells	Steals	Fails to complete chores
Whines	Lies	Destroys property
Complains	Argues	Physically fights
Defies	Humiliates/Annoys	Fails to do school homework
Cries or holds breath	Teases	Disrupts others activities
Tantrums or screams	Ignores requests	Ignores self-care routines
Throws objects	Self-injury	Runs off
Argues or sarcastic	Swears	Physically resists

Source: Defiance Children: A Clinician's Manual for Assessment and Parent Training, Barkley (2012)

Poor Quality Parent-Child Interaction

Many researches repeatedly demonstrate that the quality of parent-child interaction is reliably and strongly associated with noncompliance

behaviours during childhood. Some studies indicated that poor parent-child interaction tends to sustain or increase the occurrences of noncompliance behaviour in children (Barkely, 2012; Beauchaine, Hinshaw, & Pang, 2010). A very poor attachment relationship with parents and the family members is showed by children with noncompliance behaviour along with their significantly higher rates of stubbornness, temper outbursts, arguments, verbal defiance, and even physical aggression in their interactions. One of the poor quality parent-child interactions is disrupted parenting. Disrupted parenting is repeatedly identified in many research studies has been found as a major proximal contributor to noncompliance, defiance, and social aggression (Barkley, 2012; Harvey & Metcalf, 2012; Mokrova, O'Brien, Calkins, & Keane, 2010). The essential features of disrupted parenting are ineffective, inconsistent, lax or even timid child management methods being employed by parents which often combined with unusually harsh and inconsistent disciplinary methods (Deater-Deckard, Wang, Chen, & Bell, 2012; Harvey & Metcalf, 2012). Disrupted parenting also includes disrupted parental behaviours, low parental warmth, and poor parental monitoring of the child activities inside or outside the home (Ellis & Nigg, 2009; Harvey & Metcalf, 2012; Mokrova et al., 2010).

A 4-year longitudinal study conducted by Harvey & Metcalf (2012) was to examine the interaction pattern between preschool children and parents in predicting later disruptive behaviours. There were 138 boys and 120 girls of 3-year-old children and their parents from diverse backgrounds included in the study and 199 of these children had problems of hyperactivity and 59 children with no behavioural problems. Mothers and fathers independently completed the Disruptive Behaviour Rating Scale-Parent Version (Barkley & Murphy, 2008). The interaction between children and their mother were coded during 5-minute play and clean-up tasks. Global warmth ratings such as parents positively attentive to child (praise, supportive, conveyed interests and affection in interaction with child) were coded. Results indicated that lower parental warmth (negatively attentive, not used praise to the child, laxness, and depression) predict more externalising problems of hyperactivity in children. The study suggested that hyperactivity behaviour may develop and sustain through a negative interaction between parent and child across the preschool year.

Another study conducted by Mokrova et al. (2010) to examine links between disrupted maternal and paternal behaviours and their ASD symptoms on children behaviours. The participants were 311 mothers and 149 fathers of young children have been assessed through self-reports to identify the ASD symptoms, level of home chaos and parenting practices. Then, teachers were asked to identify the child noncompliance symptoms. The results found that, mothers tended to report higher home chaos when they or their children had higher levels of noncompliance symptoms. The parenting practices of mothers have been found to be inconsistent discipline and non-supportive responses to noncompliance children's negative emotions, and these associations were mediated by home chaos. The parenting practices of fathers have been found to be more inconsistent discipline, lower involvement with children, and non-supportive responses to children's negative emotions. The research indicated that ASD parents and living in a chaotic home environment were linked to inconsistent discipline and non-supportive responses to children.

A study conducted by Deater-Deckard et al. (2012) was to examine the association between challenging child disruptive behaviour (noncompliance, anger, impulsivity) and harsh parenting. The participants were 147 mother-child dyads in which mothers' age (*M=32.80 years*, SD=*6.17*) and children's age (*M=57.29 months SD=15.54*). The negativity scale of Parent Feelings Questionnaire (PFQ) was used to measure the maternal self-reported of harsh parenting (Deater-Deckard, 2000). For assessing the child disruptive behaviours, each mother also rated her child's challenging behaviours problems. The study found that mothers with poor parenting practices have higher levels of harsh negativity and associated with child disruptive behaviour (noncompliance, anger, impulsivity). In contrast, mothers with better parenting practices, the child disruptive behaviour was not associated with maternal harsh negativity. The harsh parenting influence on children's behaviours development in part through its impact on parenting behaviours and interactions.

Another study conducted by Ellis and Nigg (2009) was to examine the relationship between noncompliance diagnosis and symptoms domains in children with parenting practices. The parenting practices were included parenting monitoring, involvement with children and disciplinary practices. The study was conducted among 181 children aged six to 12

years old. For assessing parenting practices, the six domains were included in APQ assessment: involvement, positive parenting, poor monitoring, inconsistent discipline, corporal punishment, and other discipline practices. The results found that parents' inconsistent discipline, parents' low involvement, and poor monitoring were meeting DSM-IV criteria for ADHD in children and developed children's disruptive behaviours. The study indicated that lack of father's participation and involvement in family could increase the likelihood of maternal ineffective parenting and monitoring of the child's activities, and also deprived the need of socialisation opportunities in children.

Based on the researches above, there are four factors of disrupted parenting associated with children's disruptive behaviours (noncompliance) especially among those children who have ASD symptoms. These factors are, low parental warmth, ineffective parenting (inconsistent discipline and harsh parenting in managing child's behaviour), disrupted parental behaviours, and poor parenting monitoring on child's activities (see Table 1). These four factors of disrupted parenting are among the major contributor to noncompliance behaviours in line with the child's ASD features, and affect the quality of parent-child interactions. According to Danforth, Harvey, Ulaszek, and McKee (2006), some researches have shown that treating noncompliance behaviours using appropriate intervention often results in significant improvements.

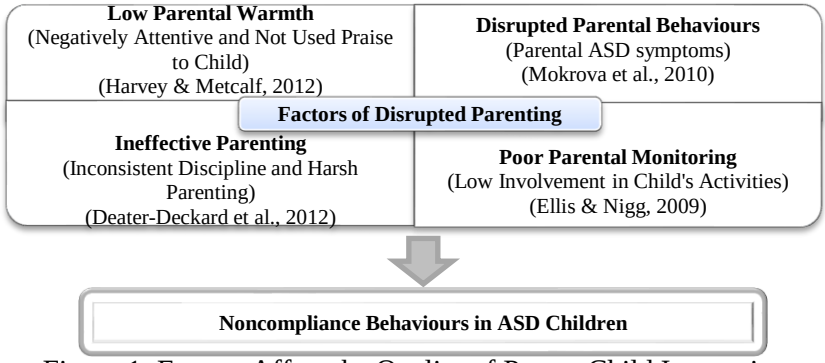

Figure 1: Factors Affect the Quality of Parent-Child Interaction

Addressing behaviour problems among preschool children with ASD is important because disruptive behaviours appear to reach their peak levels by the time children enter the primary school. With a rapid growth in the

country development, Malaysia is becoming increasingly conscious the need of child mental health cares and special education services. Many parents and teachers are increasingly their awareness of children's problems and looking for the professional helps. Parents often need relevant information about positive parenting techniques, support groups at school or in community to understand appropriate expectations for behaviour and school works in their affected child. The findings may benefit the individuals or organisations who directly or non-directly working with ASD children and to provide preliminary guideline on the next step in identifying the appropriate intervention use to improve parent-child relationship and reducing behavioural problems in children with ASD.

Parent-Child Interaction Therapy

The PCIT is an empirically-supported treatment for conduct-disordered for young children aged two to seven that highlights on improving the quality of the relationship between parents and child and changing inappropriate pattern of parent-child interaction. It is originally developed by Eyberg (1999). Parent training for children with behavioural problems has historically involved enhancement approaches on parent-child relationship (Guerney, 1964) and behavioural approaches (Patterson, 1994). The PCIT is based on Two-Stage Treatment Model developed by Hanf (1969) which integrates the parent training and behavioural approaches. Moreover, the PCIT consists both of behavioural parenting training and family counselling (Canadian Mental Health Association (CMHA), 2012). Behavioural parenting training teaches parents how to cope and guide the children with noncompliance behaviour. The training involves learning how to understand the main problem situations, solve problems, enforce rules and give constructive feedback. Family counselling helps family members to learn how to deal with disruptive behaviour and encourage positive behaviour in affected children (CMHA, 2012). Therefore, PCIT progresses through two distinct phases: (i) Child-Directed Interaction (CDI), and (ii) Parent-Directed Interaction (PDI) to help parents to cope with their ASD child.

The CDI is similar to play therapy in which parents engage with their child in a play situation with the goal of strengthening the parent-child relationship. It also emphasises PDI which empowers the parent with behaviour techniques through a therapeutic model (Eyberg & Funderburk,

2011). In PDI phase, parents learn to use specific behaviour management techniques as they play with their child (Eyberg & Funderburk, 2011). During PCIT, therapists coach parents while they interact with their child, teach them the strategies that will promote positive behaviours in children. As a result of PCIT, researches have shown that parents gained more effective parenting skills, improved in parent-child relationship and decreased in behaviour problems among affected children (Eyberg & Funderburk, 2011).

One of the researches has shown empirical support for the application of PCIT for families of children with ADHD. Bagner and Eyberg (2007) conducted PCIT to treat disruptive behaviours of children ages three to six years old with mental retardation and comorbid ODD. There were 30 female primary caregivers and their children were randomly assigned to an Immediate-Treatment (IT) or Wait-List (WL) control group. Caregivers reported that PCIT helped to decrease disruptive behaviours in their children at home, reduce the parenting stress, increase positive interaction between parents and their children, and children were more compliance. The PCIT is a form of counselling intervention for parent training as a way to treat young children with serious behavioural problems that have been used for many years and have been found to be very effective. The PCIT used a unique combination of counselling elements of play therapy and behavioural therapy to address many child behaviour problems effectively (Counselling Directory, 2014).

Statement of The Problem

Given the four factors of disrupted parenting, including low parental warmth, ineffective parenting (inconsistent discipline and harsh parenting in managing child's behaviour), disrupted parental behaviours, and poor parenting monitoring on child's activities are among the major contributor to noncompliance behaviours in line with the child's ASD features, it is important to study the effectiveness of parental interventions to treat this ever-growing population. The purpose of this literature review is to examine the research on parental interventions that is Parent-Child Interaction Therapy used for children with ASD and to examine the efficacy of PCIT procedures and training based on empirical studies.

Research Objective

- To identify, through a literature review, the effectiveness of Parent-Child Interaction Therapy to improve the quality of the relationship between parents and child and change inappropriate pattern of parent-child interaction.
- To identify, through a literature review, the effectiveness of Parent-Child Interaction Therapy to reduce noncompliance behaviour in children with Autism Spectrum Disorder.

Literature Review

This chapter discusses seven major sections that present a review of literature that is related to the study. The literature reviews covered relevant previous researches as well as the theories and concepts. All sections discuss are as the following:

Overview Parent-Child Interaction Therapy
Rationale for choosing Parent-Child Interaction Therapy
National Treatment Policies on Children with ASD

Overview Parent-Child Interaction Therapy

Some studies found that parent-child intervention at improving behavioural symptoms among ASD children is Parent-Child Interaction Therapy (PCIT) is recommendable (Counselling Directory, 2014; Eyberg & Funderburk, 2011). The PCIT combined both play therapy and behavioural therapy to help facilitate the development of effective parenting techniques and reduction in behaviour issues and may also lead to a stronger familial relationship. This approach is effective for children who behavioural problems. The PCIT progresses through two distinct phases: CDI and PDI parenting skills. In CDI phase, the parenting skills that parents learn are represented in the acronym, PRIDE, which stands for Praise, Reflection, Imitation, Description, and Enjoyment. In PDI phase, parents are learn how to give appropriate, clear, and direct commands in order to maximise chances for child's compliance. Parents are also learned specific discipline method by using time-out to deal with child's noncompliance behaviours. These strategies provide parents with appropriate tools to manage their children's behaviour and avoid parents from using physical power, and to promote children's emotional regulation (Urquiza & Timmer, 2014). The live coaching and monitoring the parental acquisition skills from therapist are the main method of training in PCIT (Eyberg, Nelson & Boggs, 2008). There is a growing

trend in the psychological literature describing implementation of PCIT intervention format. There are two formats of PCIT can be delivered, (i) standard and (ii) abbreviated.

Abbreviated Intensive PCIT Format

Traditionally, the standard PCIT is delivered in weekly one hour sessions and families' average time in treatment ranges from 12 to 14 sessions (Nixon, Sweeney, Erickson, & Touyz, 2003) or 12 to 16 sessions (Thomas & Zimmer-Gembeck, 2012). The abbreviated or brief PCIT intervention is popular because the perception by consumers that treatment is excessively demanding has been shown to interfere with therapeutic change (Lewis, 2010). It has been found that early intervention programme with fewer treatment sessions was more effective than those with higher treatment sessions. These evidences have been documented in several studies (Abrahamse, Junger, Chavannes, Coelman, Boer, & Lindauer, 2012; Graziano, Bagner, Slavec, Rodríguez, Kent, Babinski, Derefinko, & Pasalich, 2014; Lewis, 2010; Nixon et al., 2003) in which four to 5-session of PCIT treatment was effective in treating behavioural issues in children.

A study conducted by Abrahmse et al. (2012) was to investigate the effects of PCIT in short format (5-session) in decreasing the intensity of disruptive behaviours in Dutch children. This study was based on the data of 37 referred families in Netherlands. The participants were 17 children (45.9%) met the DSM-IV diagnostic criteria for ODD and ADHD. It was assumed that PCIT (short format) will produce positive effect on the pattern of disruptive behaviour of these young children. The CDI and PDI sessions began with a didactic parental teaching in which parents were coached by the therapist. The study found that there were 73.9% mothers reported a significant decreasing in their child's disruptive behaviours with the scores showed within the mild ranges of behaviour problems. The study supported the hypothesis that PCIT (short format) has positive effect in reducing the disruptive behaviour among preschool children with ODD and ADHD.

Graziano et al. (2014) conducted a study to investigate the feasibility of implementing a brief and intensive format of PCIT to treat behaviour problems in young children. The participants were 11 children (M=5) years old who displayed elevated externalising behaviour include aggression, defiance, and ASD. Children were referred from

paediatricians (36%), school personnel (28%), and self-referred (36 %). The adaptation of PCIT involved changing the length of the intervention but no changes to the principles of treatment and the core skills. Each family received 10 total sessions which required 90-minute session for five days in a week for two weeks concurrently. The study found that, parents reported decreased in child externalising behaviour and increased in child compliance behaviour. This brief and intensive version of PCIT was acceptable to all enrolled families with zero attrition rates. Based on TAI assessment, most parents reported highly satisfied (M = 48.10) out of 50. The study concluded that parents were more convenient to enrol in brief version of PCIT.

A study conducted by Lewis (2010) to evaluate the efficacy of an Abbreviated Intensive PCIT protocol with a population of preschool aged children displaying mild to moderate levels of disruptive behaviour. The Intensive Treatment included two-hour sessions across five consecutive days. This Intensive Treatment was followed by Maintenance Treatment which was comprised of three weekly 30-minute telephone calls and finished with 1-hour booster session. The study hypothesised that parents would report improved in child behaviour across baseline and post-treatments. Six families with children who have mild to moderate disruptive behaviour involved in the study. The results found that all children have higher mean alpha compliance percentages at post-treatment (Intensive Treatment, Maintenance Treatment, and Follow-up) as compared to the mean alpha compliance of the three baseline observations. The results contributed to the additional growing body of literature on the efficacy of short-term format of PCIT to address childhood disruptive behaviour.

A study conducted by Nixon et al. (2003) was to compare between standard format of PCIT (STD) and the abbreviation format of PCIT (ABB) in reducing behavioural problems in preschool children. For the STD group, 17 families (14 boys and 3 girls) and the ABB group, 20 families (13 boys and 7 girls) completed the treatment. The STD treatment consisted of 12 one to two hours weekly sessions. For the ABB treatment, therapists discussed and modelled the parenting skills on videotape and gave a copy to the family to watch at home. The face-to-face sessions were alternated with the 30-minute telephone consultations. Both STD and ABB treatments included 1-hour booster session of face-to-face after 1-

month post-treatment. In term of treatment hours, STD took 15.5 hours and the ABB took 9.5 hours to administer. The findings indicated that children in the STD and ABB groups were not significantly different in terms of their behavioural improvement. Thus, the study suggested that ABB was effective to cope with child's behavioural disorders.

Nixon Sweeney, Erickson, and Touyz (2004) extended the research in ABB format whether it maintained short-term gains in reducing behavioural problems in preschool children at 1- and 2-year follow-up. The participants were 67 Australian children who met the diagnostic criteria for ODD were randomly assigned to three groups STD, ABB and WL. The samples were 54 children consisted of (STD=17), (ABB=20) and (WL=17). On average, children in the final sample were 46.8 months old with 70.4% (boys) and 29.6% (girls). Children in the STD and ABB groups required to participate in a follow-up study that assessed children's behavioural functioning at 6-month, 1-year, and 2-year post-treatment. Data were collected for participants in the STD and the ABB at all time-points. For the WL, data were only collected at pre-test and post-test, as this group was a WL control group that entered treatment following post-test. Results indicated that immediately following treatment (post-test) children in STD and ABB groups had significantly less oppositional and conduct behaviours than children in the WL. The analysis of follow-up data indicated that there were no significant differences on any outcomes for both children in STD and ABB groups. The findings suggested that abbreviated form of PCIT has long-term advantages similarly to standard PCIT for families with young children displaying behaviour problems.

Rationale for Abbreviated Intensive Parent-Child Interaction Therapy

The Abbreviated Intensive PCIT is not as other parent training programmes which have been implemented in Malaysia because this type of intervention is directly addressed child's behaviour problems and building supportive relationship between parents and child. Many of parent training programmes are specifically focusing on helping parents to improve their parenting skill such as teaching parents appropriate parenting skills in coping with disruptive behaviour in ASD children by encouraging positive behaviour between parents-child (Marziyeh & Khaidzir, 2009) rather than focusing on treating disruptive behaviour problems. For example, filial therapy as conducted by Marziyeh and

Khaidzir (2009) was a type of play therapy and it was lacked of behaviour therapy components that important in disciplining behaviours in children. Behavioural therapy involve helping parent to directly improve the child's behavioural problems using related methods such as time-out and discipline action at home or in public (Block & Smith, 2014). The Abbreviated Intensive PCIT is one of counselling interventions that integrated both of play and behavioural therapies. It is emphasising on improving parent-child relationship and helping parents to build effective parenting skills to increase their positive verbalisation and decrease their child's negative behaviours. Parents can learn better ways to deal with the ASD children that include how to set and enforce rules, help the child understand what he or she needs to do, use discipline effectively, and encourage good behaviour.

Play Therapy in Parent-Child Interaction Therapy

According to British Association of Play Therapy (2009), play therapy is a child-centred in which play is the primary medium and speech is the secondary medium. Most of the young children express themselves through play, when meaningful discourse is not possible to them. Conversely, play is an indirect way for therapists to recast children's perceptions, cognitions, and behaviours (Kingsley & Mailloux, 2013). Play therapy counsellors or therapists observe for patterns and themes in children's play to make responses that produce therapeutic movement and ultimately catharsis related to the children's problems. The difference between play and therapy is the counsellor's ability to think analytically about everything that is going on during the session in a form of verbally, nonverbally, or symbolically in child's play. Play therapy also is acknowledged educationally and clinically as an effective intervention to improve the mental health of child clients. For children below 10, their cognitive and verbal abilities to involve in fully talk form of counselling are not properly developed. Their natural form of communication occurs through play. Thus, play therapy developed out of the realisation that traditional talk forms of counselling does not seem to be effective with young children due to their limitation in developmental levels and capabilities (Schottelkorb & Ray, 2009). During CDI phase, child will lead play situation in which parents coached by therapist to learn to follow their child's lead. Parents required to model appropriate play behaviours such as sharing the toys with their child. Typically, at the completion of treatment, parents show decrease in negative talk, increase in pro-social

talk, and physical warmth toward their child. Several studies of play therapy (Harwood & Eyberg, 2006; Schottelkorb & Ray 2009) have shown positive impacts on children with behaviours that required counsellors to improve their profession.

A study conducted by Schottelkorb and Ray (2009) was to examine the effects of play therapy and teacher consultation for four young children diagnosed with aggressive behaviour symptoms. Of the four participants, one child had received a formal diagnosis of ADHD and none took psycho-stimulant medication at any time throughout the study. The play therapy that employed by researchers was known as Child-Centred Play is a child-centred, in which play is the primary medium and speech is the secondary medium. In the study, all play therapy sessions were conducted in playrooms set up with toys by two trained counsellors. The teacher consultation provided the core conditions required of person-centred counselling: unconditional positive regard, genuineness, and empathy. The researchers used the Direct Observation Form (DOF) three times per week to assess student on-task behaviour throughout the baseline, intervention, and post-intervention phases. The study found that two students demonstrated a substantial reduction in their aggressive behaviour symptoms due to participation in play therapy sessions with trained counsellors. The results also indicated that play therapy demonstrated effective results than teacher consultation. Thus, the study suggested that it is important for counsellors to know how to use play therapy to help children with behaviour issues to be fully functioning in their lives.

Another study conducted by Harwood and Eyberg (2006) was to examine the first phase of PCIT, called CDI among 100 mother-child dyads. The CDI is similar to play therapy in which parents and their child engaged in a play situation with the aim to strengthen the parent-child relationship. There were 69 boys and 31 girls aged between three to six years and diagnosed with disruptive behaviour disorders. After the pre-treatment assessment, families participated in weekly, 1-hour CDI sessions. Therapists included games that facilitate discussion and social skills development whether play with the toys and games are child directed. Therapists had a sound theoretical rationale for selecting and placing toys and materials in a play therapy playroom. Toys allow for creative and emotional expression, testing of limits, and role-playing reality. After the

CDI phase of PCIT, mothers reported significant reduction in parenting stress, dysfunctional parenting practices, and child disruptive behaviour, and nearly half the mothers rated their child's disruptive behaviours within normal limits. These findings illustrated the powerful influence of contingent positive parental attention during play therapy on the transactions of mother-child dyad.

A study conducted by Ku Suhaila, Bruce, and Mohamad Isa Amat (2014) to investigate the effectiveness of play therapy by conducting 3-day training sessions in different part of Malaysia for a total of 116 participants including mental health students and practitioners. The participants in this study were counselling students (undergraduate, masters and doctoral) and practitioners in Malaysia and some of them registered with Malaysian Board of Counsellor. The training covered various learning experiences including lectures, readings, discussions, role playing with the instructor and peers, live demonstrations, and observation of the instructors' and peers' play therapy sessions. Four research questions guided the study in exploring the differences on the three subscales: attitude, knowledge, and skills in play therapy. The study found that, there were no differences between the students (without experiences) and practitioners (with experiences) in gains on scores in attitude, knowledge, and skills throughout the training. Although practitioners have more general working experiences than students, the training provided the same overall consequence for both groups. This study indicated that play therapy is beneficial and important to who work and deal closely with the affected children in support of their well-being.

Behavioural Therapy in Parent-Child Interaction Therapy

Although several studies have documented the effectiveness of play therapy during CDI phase, however, some studies also documented that children participating in behavioural therapy during PDI phase increase in their compliance behaviours toward parental commands and decrease in their disruptive behaviours (Bagner & Eyberg 2007). Thus, the main objective of behavioural therapy in PDI for children is to cut down the disruptive behaviours that can get them into trouble at school, and to turn family life into a better zone (Karras, 2013). Thus, PDI teaches parents to use specific behaviour management techniques as they play with their child. The specific behaviour management skills are include how to

discipline the child by using the effective commands and time-out procedures.

First, PDI focuses on giving children effective commands, and teaches parents how to give commands appropriately (Eyberg, Nelson, Duke, & Boggs, 2009). If a child is noncompliance with a command, parents is taught to wait, issue a warning, and then proceed to an effective time-out if the child remains noncompliance. Eyberg et al. (2009) offers eight rules for issuing commands. Commands should be direct, not in question form, given one at a time, positively stated, specific, age appropriate, polite and respectful. If a child disobeys a command twice, he or she is brought to a time-out chair or room, if the child does not want to remain sit on the chair, then parent reissued the command until compliance is reached. One reason of effective command issuing is that although parents may assume that a disobedient child is being oppositional, it may just be that the child does not comprehend the vague commands of the parents. For clinical practice, it may be recommended to start the intervention with the discipline stage of PDI before the play therapy of CDI for certain children especially those with behaviour that is extremely out of parental control and potentially dangerous. The important concept behind PDI is no matter what occurred beforehand, compliance with a command is immediately followed by a labelled praise from the parent, thus, it is positively reinforcing the compliance behaviour in children.

Second, the time-out procedure is a form of non-harmful punishment that involves temporarily separating a child from an environment where unacceptable behaviour is intended as extinction of the offending behaviour. In PCIT, it is an effective form of child discipline (Stassen, 2014). Parents learn to use specific time-out procedure when their child does not comply with command given or demonstrates other rule-breaking behaviours. Time-out is an effective strategy to deal with ADHD child because it is used less as a punishment and more as a way to cool down the child. If the child becoming frustrated or is about to lose his or her temper, the child is bring to sit quietly in a boring area for a minute with no interaction from parent. If the child is able to calm down, welcome the child back into parent's company and provide the child time in by praising his or her effort (Karras, 2013). For children, a time-out is very effective in reducing behavioural problems if parents follow the procedure appropriately, give the child opportunity to comply and provides time for

them to make decision when the child is ready to return to the activity (Eyberg et al., 2009).

A study conducted by Donaldson, Vollmer, Yakich, and Van Camp (2013) was to evaluate a time-out procedure to increase compliance with the verbal time-out instruction among children aged three to five years old. Six children had been referred by their preschool teachers because they exhibited behaviour problems at school. The time-out location on the playground was a chair on the perimeter of the playground, whereas the time-out location at home took place in the bedrooms. The behaviour problem was defined as breaking playground rules or house rules. The effects of time-out were demonstrated using an ABAB reversal design. The two time-out procedures were compared using a multi-element design during the treatment phases: 4-minute and 1- or 4-minute. Results showed that time-out was effective in reducing problem behaviour of all six participants. Both the 4-minute and the 1- or 4-minute time-out procedures decreased problem behaviour to zero or near-zero levels. Therefore, time-out is effectively reduced problematic behaviour and increase compliance.

Other elements in PDI phase are positive punishment and positive reinforcement that is central to behavioural therapy (Karras, 2013). Parents practice positive reinforcement for desired behaviours, and when a child fails to comply with an instruction, there is a strict series of positive punishment in the form of escalating time-outs. The behavioural therapist details the concepts and procedures derived from positive reinforcement such as contingent delivery of attention, praise, points and punishment such as time out from reinforcement, loss of privileges, and reprimands. The positive reinforcement for pro-social and positive punishment for non-deviance behaviour is central to treatment. During PDI phase, parents are taught how to use positive punishment and reinforcement techniques contingent on the child's behaviours, to provide consequences consistently, to attend to appropriate behaviours, and to ignore inappropriate behaviours. In Malaysia, however, research in parental behaviour training and their relation to children behaviour improvement still lack and attending counselling also stigmatised. According to Malaysia Psychiatry Association (2011), behavioural therapy conducted with the aim to help children to control aggression, modulate social behaviour, and be more productive. Behaviour therapy can be used to help parents improve their parental behaviour and manage their behaviour and

parenting skills (Harwood & Eyberg, 2006) in reducing disruptive behaviours in children.

National Treatment Policies on Children with ASD

Early detection for children with disabilities aged four to six years old falls within the purview of both Ministry of Health (MOH) and Ministry of Education (MOE). Specific development screening tests are conducted at various stages of the child's growth and development. The MOH under Family Health Development Division (FHDD) piloted a specific development health screening at 5-month, 12-month, 18-month and 4-year. This screening programme strongly encouraged health professionals to take note of parental concerns of developmental delay and incorporated a child developmental checklist to assess parental concerns of ASD screening for children at four years old (Amar-Singh, 2008). This screening programme involves both parents and healthcare providers to look out for and act on the early signs of potential disabilities. Apart from early detection, the MOH provides healthcare and treatment programme for children with disabilities. Basically, the treatment goal for ASD children is to improve disruptive behaviours, learning, social interactions and self-worth or self-esteem (Ministry of Health, 2011).

The treatment policy for children with ADHD is categorised under the MOH Health Care for Persons with Disabilities Years 2011-2020 Plan Action (PWD Healthcare Plan of Action) is said to meet the obligations and strategies under the Committee on the Rights of Persons with Disabilities (CRPD), PWD Act and National Policy. According to MWFCD (2013), the health strategies under the PWD Act and National Policy are to increase health services, including prevention, detection and early intervention (primary care) and to increase the quality of medical services for the disabled (secondary and tertiary care). Therefore, these ASD children are eligible for registration with the MWFCD to get the PWD Card. PWD Card is a mark of identification issued to people with disabilities who are registered with the Society Welfare Department (SWD) in order to facilitate them to deal with the parties concerned. The PWD policy is based on the concept of equality of rights and opportunities for PWD to participate fully in society. Thus, based on this policy, the MWFCD established Community Based Rehabilitation (CBR) centres throughout the country. CBR centre is a one-stop centre for PWD that provides services such as diagnosis, rehabilitation, treatment, special

education and vocational training (Nalasamy & Siti Hajar, 2013). Other than CBR, for children with disabilities who aged four to six years, early intervention programmes are provided by the MOE in Special Education schools under special needs education system (Fong, 2013).

SUMMARY OF MAIN FINDINGS

Implications Parent-Child Interaction Therapy for Treating Children with ASD

The previous literatures suggested that use of immediate parent feedback through coaching, explicit directions to parents in how to respond to child behaviour, and customisation of the application of CDI and PDI skills to the problems that arise in session are important components to effective parenting programmes with parents. Moreover, there were many benefits to Abbreviated Intensive PCIT such as it is a brief, short-term family counselling procedure that teaches effective parenting skills and helps parents interact better with their children on a daily basis. Fundamentally, PCIT's two-tailed approach benefits both parents and children by reducing the internalisation of problems. Additionally, PCIT empowers parents through teaching positive interactive techniques that build parent-child relationship. PCIT fosters creativity and increases child self-esteem, decreases noncompliance behaviours, and increases the quality of parent-provided positive regard through developmentally appropriate play. Moreover, this intervention has been found successfully to deal with child's behaviour and learning problems and also with parenting stress and negative attitudes toward their child.

Mental health or behavioural issues in children can have a profound impact on how people think, feel and behave which can range from the daily worries people all have from time to time, to serious long-term problems that require treatment to manage effectively. Mental health counselling involves talking about the problems with a trained counsellor or psychotherapist. Talking therapies can help clients to understand what may have caused their problems and how to manage them. Thus, based on the findings of this study, it is recommended for Including Parent-Child Interaction Therapy for ASD Intervention. Although it was recognised that one size does not fit all, PCIT has shown significant results with ethnic minorities and underserved populations in effectively increasing positive parenting behaviours and decreasing behavioural problems in children.

The findings of this study support the notion that PCIT is culturally effective and produces robust modifications among diverse groups (Bagner & Eyberg, 2007; Matos, Bauermeister, & Bernal, 2009). Therefore, with some modifications and recommendation, this PCIT intervention can be used effectively in coping with children with disruptive behaviours and not limited to ASD only.

Implications for Further Research

Further research is needed regarding the use of Parent-Child Interaction Therapy as one of the intervention approaches to improve parent-child interaction and to reduce noncompliance behaviour among children with ASD. The study of effective interventions needs further investigation. This research could hold great importance for children with ASD. More research is needed to determine the relative effectiveness of single procedures and strategies within each approach and which combinations can be most effective. Additionally, more research is needed to further validate the overall effectiveness and utility of PCIT intervention children with ASD. Furthermore, the findings of the study can provide valuable information and guideline for school counsellors, teachers, parents and community about early symptoms of ASD in children and relevant intervention used to treat affected children. The teachers and school counsellors are resources for initial identification, screening and assessment for ASD symptoms, they must have good working knowledge of typical symptoms and well-trained in conducting early interventions for ASD problems either psychological or behavioural issues. Thus, the findings of this study can be a resource for screening, assessing and treating ASD behavioural symptoms in young children. By understanding this, there is an opportunity for researcher to tailor the parents' needs in coping with their child's behaviour problems. Overall, the findings of this study demonstrate the potential of PCIT as an early intervention to improve the behavioural functional outcomes of preschool children with ASD. The study suggested that the treatment strengthened parent-child attachments, increased positive interactions between parents and their children, and equipped parents with evidence-based disciplinary practices to improve children's compliance behaviours. These potential outcomes of the study have important implications for children's long-term outcomes, as stable parent-child attachments promote children's social, behavioural, and emotional development.

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