

Effects of parent child interaction therapy on children with language delay at a tertiary care hospital of Lahore, Pakistan

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Submitted

January 12, 2021

Accepted

February 15, 2021

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Citation: Fatima A, Noreen H, Ashraf T, Khan MSG, Iftikhar N, Saeed B. Effects of parent child interaction therapy on children with language delay at a tertiary care hospital of Lahore, Pakistan. J Rehman Med Inst. 2021 Jan-Mar;7(1):19-23.

ABSTRACT

Introduction: Parent-child interaction therapy is widely used by speech language therapists to improve the interactions between children with delayed language development and their parents'/care takers.

Objective: To find the effect of parent child interaction therapy on children with language delay.

Methodology: It was an interventional study design, conducted between June 2020 to August 2020. The study included 32 children with diagnosed Language Delay. Parents of children with language delay were introduced PCIT through conduction of a workshop. Mother having age between 24 to 40 years were included in this study and children who were included in the study were diagnosed language delay and were between the ages of 36 months to 72 months. Children with neurodevelopmental and other disorders with language delay were not included. Twice in a week therapy sessions were conducted and parents were guided by the SLP about the therapy and its strategies. Portage Guide to Early Education was used for pre and post assessment of language development by a neutral speech and language therapist.

Results: Parent Child Interaction Therapy is a useful therapy technique for the improvement of a child's language development. Before and after having PCIT the child language age (Mean -3.125 months, SD 1.43122). Hence, the p value of paired t test is 0.000 which means there was significant mean difference in scores of language delay before and after Parent Child Interaction Therapy.

Conclusion: PCIT helps language delay children to improve their language. Parents also learn a way to interact with their children in a good healthy environment and sustain their learnt skills that help in their child's grooming, behavior, communication and developing a child's personality.

Keywords: Parent with language delay, Child Interaction Therapy, Children with Language Delay, Language disorders.

The authors declared no conflict of interest. All authors contributed substantially to the planning of research, data collection, data analysis, and write-up of the article, and agreed to be accountable for all aspects of the work.

INTRODUCTION

The parent child interaction is one of persuasive, significant, and important relationship in a person's life. The relationship among parents and kids empowers their bond and capacities to socialize youngsters (i.e., sexual orientation, profession and work, relationship terms and abilities, and wellbeing behaviors), offer social encouragement, friendship, understand their mind, manage private data, and make a family relationship in a healthy environment. Parents react distinctively to the needs of their youngsters, given the exceptional social community that ordinarily exist in mother-child versus father-child connections.¹

Parent Child Interaction therapy (PCIT) is broadly utilized by language pathologists to enhance the associations between youngsters with delayed language advancement and society. Researchers have investigated the impacts of PCIT as planned out by language pathologists inside a clinical setting. In a study 18 successive children were introduced to discourse and language therapy. PCIT was used as a medium of therapy. Evaluations were observed two times before treatment to watch change without treatment and once subsequent to finishing PCIT. Huge change in the language development was observed after the conduction of the therapy.⁵

PCIT has sequential phases referred to as Child-Directed Interaction (CDI) and Parent-Directed Interaction (PDI). Each stage shows guardians' relational abilities that encourage positive parent-youngster connections and procedures of differential support. PCIT abilities are instructed by means of instructional introductions to guardians and direct training of guardians while they are connecting with their youngsters. The beginning of each stage incorporates an instructive meeting intended to educate the parent explicit aptitudes identified with each period of the treatment. The rest of PCIT consists of direct schooling conferences that furnish and determine with spark off approval for fitting reactions to their teen's conduct and remediation of unseemly reactions. In spite of the reality that the length of

remedy time in PCIT is referred to as issue, as trade from CDI to PDI occurs when Authority Criteria for the main degree has been done, past PCIT studies revealed the regular duration of treatment time as thirteen classes.⁶

An overview was directed to discover relations among a guardian preparing program for youngsters with extreme conduct issues (Parent–Child Interaction Therapy; PCIT), child Emotional Reaction (ER), parental figure ER, child rearing pressure, and weakening. This examination was important for a bigger examination assessing the effect of motivations on treatment outcomes. Measures of guardian and youngster ER, child conduct issues, and child rearing pressure were finished via parental figures alluded for PCIT from a dominantly low-salary network test of 66 parental figure child dyads. Parental figure ER and youngster ER liability/cynicism improved altogether across the two periods of PCIT. Youngster versatile ER improved essentially from pre-to post-treatment and during the second period of treatment for those kids in the non-impetuous bunch as it were. Standard degrees of youngster and guardian ER were not critical indicators of attrition. Findings are examined regarding the significance of both guardian and kid ER in the arrangement of PCIT and other conduct parent preparing programs.⁹

Parent-child interaction therapy treatment assists guardians with improving the nature of collaboration with kids who have conduct issues. The treatment trains guardians to utilize viable discourse acts while cooperating with their kids. Other than week after week instructing by specialists, the treatment depends on purposeful act of aptitudes by guardians in their homes. We created Special Time, a framework that furnishes guardians occupied with PCIT with programmed, constant criticism on their discourse demonstration use. To do this, we initially made an informational collection of 6,022 parent exchange acts, explained by specialists with discourse act marks that advisors use to code parent discourse. We at that point built up a calculation that arranges the discourse demonstrations into 8 classes with a general exactness of 78%. To test the framework in a real clinical setting, we led a one month pilot concentrate with four guardians as of now in treatment. The outcomes propose that programmed criticism on spoken exchange acts is conceivable in PCIT, and that guardians locate the programmed input helpful.¹⁰

MATERIALS & METHODS

Participants from Hameed Latif Hospital, Lahore were taken in the current study. Speech Language Pathologist monitored and guided the parents about Parent Child Interaction Therapy. A group session of parents was done prior initiating the therapy, in which detailed presentation was given to the parents. Thirty-two parents and children with language delay were recruited in the study. Pre diagnosed children with mild to moderate language delay were taken in the study. Age criteria were between 36 months to 72 months at the time of their first clinic appointment and had not previously received therapy and were assessed by Portage guide to early education (PGEE). Mother's ages were between 20 to 40 years. Children with other developmental disorders and neurodevelopmental disorders were not included in

this study. Non-probability purposive sampling technique was used for the current study. Sample size was calculated by using the following formula: $n = (Z_{1-\alpha/2} + Z_{1-\beta})^2 \sigma^2 / \Delta^2$.

The confidence interval was taken as 95% with 5% precision. The calculated sample size was 27, adding 20% dropout, the final sample size was 32.

The study was conducted between June 2020 to August 2020. Therapy was conducted for the period of 10th weeks and for one-hour session twice in a week. This involves pre and post language assessment by another SLP to reduce biasness. The Portage guide to early education was used for it. The parent and child attend an assessment appointment in week 10th where the child's language and communication skills were discussed and compared with those at initial assessment. Clinical sessions last for one hour and aim to give parents strategies to support interactions. SLP observed the parent how they interacted with their child and discuss with them. The therapist highlighted positive strategies used by the parent and introduces the parent rating scale. Parent rating scale was used for this study. It was consisted of 11 strategies and from Never to Always having 4 categories, parents rate themselves that how they can interact with their children in special time and play time that will help you to communicate well. This scale was used by parents to rate themselves and in the present investigation as an outcome measure to assess their progress. It enlists interaction strategies and parents were asked to rate their performance.⁵ This is a scale used by parents to rate themselves. It lists interaction strategies and parents were asked to rate their performance in the clinic. A discussion of the objectives of the therapy and their intended effects on the child can take place. The table in PERFORMA/QUESTIONNAIRE lists strategies and rationale for them and is used by the therapist in giving advice to parents. Its use helps to ensure a consistent approach in the advice given by different therapists. The parent chooses a strategy they related as using 'never' or 'something' on the parent rating scale and works on this at home during the week. Parental selection of strategy at this stage is used to encourage involvement and ownership of the therapy. The therapist explains the chosen strategy, discusses it with parent and the impact it can have on their child's communication. Parents were asked to practice their chosen strategy by playing at home with their child during 3 to 5 'special time' per week. An information leaflet to support parents in using their strategy at home is given. If the target strategy is being used confidently, a further target strategy is suggested by the therapist, agreed with parents and discussed. In this way the parents practiced the use of 3 or 4 strategies during their sessions at the clinic. In session 4 therapist seek to consolidate the strategies that have been practiced. SLP ensure that parents feel confident about the strategies they will practice during the consolidation period. During the consolidation period parents practice the strategies and try to generalize their use to everyday routines and activities. The child's communication skills were reassessed by a neutral SLP. Portage Guide to Early Education was used to assess the pre and post language development of children with language delay after having therapy. That helped to calculate child's language age. SPSS (statistical package social science) 23 was used for the data

analysis. Data were analyzed for descriptive and inferential statistics. Frequencies and Percentages were taken for demographic variables whereas mean and standard deviation were used for continuous variable. For continuous and normally distributed data, paired t-test was applied to compare before and after therapy effects of language delay children having Parent child interaction therapy (PCIT).

RESULTS

Table 1 shows the demographic data; parental occupation indicated that maternal occupation included housewives (59.4%), Teachers (15.6%), Doctors (12.5%), Officer workers (06.3%), Business women (03.1%), and Other professions (03.1%); paternal occupation included Business men 43.8%, Doctors 15.6%, Officer workers 15.6%, Teachers 6.3%, Landlords 3.1%, and Other professions 15.6%. The family type of affected children were not too different, with 53.1% having Joint family system, and 46.9% Nuclear type. Majority of families (56.25%) belonged to the Upper Socio-economic class. Regarding maternal education, most mothers were well educated with 62.5% being graduates and 28.1% being postgraduates.

Table 1: Demographic data of parents (n=32).

Occupation	Frequency	Percentage
Maternal Occupation		
House wife	19	59.4
Teacher	05	15.6
Doctor	04	12.5
Office worker	02	06.3
Business woman	01	03.1
Others	01	03.1
Paternal Occupation		
Business man	14	43.8
Doctor	05	15.6
Office worker	05	15.6
Teacher	02	06.3
Landlord	01	03.1
Others	05	15.6
Family Type		
Joint	17	53.1
Nuclear	15	46.9
Socio economic status		
Upper class	18	56.25
Middle class	14	43.75
Maternal Education		
Graduate	20	62.5
Postgraduate	09	28.1
Matric	01	03.1
Intermediate	01	03.1
PhD	01	03.1

Table 2 shows the mean scores of language delay before PCIT (32.47 ± 09.21) and after PCIT therapy (35.59 ± 1.43); the improvement was statistically significant ($p < 0.001$).

Table 2: Mean scores of language delay before and after PCIT (n=32).

Paired data	Mean	SD	P value
Before PCIT child's language age	32.4688	9.23173	< 0.001
After PCIT child's language age	35.5938	9.29398	

DISCUSSION

This study was conducted to find out the effect of Parent Child Interaction Therapy (PCIT) on children with language delay. A related study was conducted to find out the impact of PCIT on child language advancement. This survey was done on 30 global diaries distributed between 2000-2018. The outside elements incorporate the climate, incitement from family, and customs or propensities, while the inner components are maternal wellbeing during pregnancy and parental qualities.¹² The relationship among parents and children powers their bond and capacities to socialize youngsters (i.e., sexual orientation, profession and work, relationship terms and abilities, and wellbeing behaviors), offer social encouragement, friendship, understand their mind, engage in strife, oversee & manage private data, and make a family relationship in a healthy environment. Parents react distinctively to the alteration needs of their youngsters, given the exceptional social community that ordinarily exist in mother-child versus father-child connections.¹ Current study's findings are the same as in this study results show that parents help the child to improve his/her language and the PCIT helps the children to improve their language development and give a better outcome for improvement in language development.

A study was conducted on impact of Parent-Child Interaction Therapy (PCIT), a parent-preparing mediation for issues related to conduct of children, on language creation by children. Members were 46 youngsters (ages 20-70 months) with externalizing conduct issues and with or in danger for formative deferral. Parent-child delay was haphazardly allotted to a control or prompt treatment gathering. Child rearing aptitudes picked up during PCIT (i.e., "do abilities") and youngsters' statement tokens and word types were estimated at standard and after 4 months. This examination found that mother's utilization of child's coordinated aptitudes assumed a significant job in the development and improvement of youngster language and the parent-preparing mediations focusing on child conduct issues may likewise encourage kid language creation.⁷ Outcome of this study are the same as PCIT helps to improve child language development.

Children with Autism Spectrum Disorder (ASD) with intellectual imbalance range difficulty habitually present with ongoing problem practices (e.g., resistance, hostility), which increment the danger for avoidance from instructive programming, social connections, and network exercises. Though PCIT was initially created for normally developing children, it is a behavior based therapy that has the potential for benefit in children with Autism Spectrum Disorder. Study suggested that the intervention was associated with acquisition of parenting abilities and decreased problem behaviors,

suggesting PCIT with modifications might also preserve gain for children with ASD and severe developmental delays.¹³ In this current study ASD children and the parents were given PICT that helps to improve language delay.

Children with co-occurring behavioral issues and callous-unemotional (CU) trends show a pattern of early beginning, chronic, and competitive antisocial behaviors which are resistant to conventional parent-schooling interventions. A study looked at the possibility of a unique version of Parent-Child Interaction Therapy, called PCIT-CU, meant to target 3 unmistakable shortfalls of children with CU qualities.⁶ The study was done at a University based Research Clinic in Australia, and included 23 families with 3-6 years old youngsters (mean age 4.5 ± 0.92 years) with clinically documented conduct issues and CU attributes; they partook a 21-week intercession and five assessments for conduct issues, CU traits, and empathy. Treatment success was high (74%), and parents expressed satisfaction with this system. Results indicated significant decreases in conduct issues and CU traits,

along with an increase in empathy, which were retained at several months of follow up, thereby providing encouraging evidence for the use of this technique.

Parent-Child Interaction Therapy is an empirically supported intervention at first developed to deal with disruptive behavior troubles in youngsters between the age of two and 7 years. Since its advent more than 40 years prior, PCIT has been concentrated globally with specific populaces and has been determined to be a compelling mediation for diverse social and severe challenges.² This study has the same results that PCIT is a supportive intervention for those who have delayed language skills.

CONCLUSION

PCIT helps language delay children to improve their language. Parents also learn a way how they can interact with their children in a good healthy environment and sustain their learnt skills that help their children in grooming, behavior, and communication to develop a child's personality.

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Abbreviations	Full form
SLP	Speech and Language Pathologist
PCIT	Parent Child Interaction Therapy
LD	Language Delay
OCD	Obsessive Compulsive Disorder
ASD	Autism Spectrum Disorder
PCI	Parent Child Interaction
PGEE	Portage Guide To Early Education