

# 1 **Parental Role in Enhancing Developmental Outcomes in a Child** 2 **with Developmental Delay: A Case Study Using the LIPP** 3 **Method.**

4

## 5 **Abstract**

6 This case study examines the development of a young child with developmental delay who  
7 received a parent-focused intervention using the Less Instruction Parallel Parenting (LIPP)  
8 method. The child showed difficulties in social communication and behaviour. The  
9 intervention included twelve online sessions over three months. Five sessions were conducted  
10 in groups and seven were individual. The LIPP method encourages parents to reduce verbal  
11 instructions and increase calm, joyful, and attuned engagement with the child. After the  
12 intervention, the child showed improvement in attention, joint attention, engagement, social  
13 interaction, language skills, and behaviour. Parents also reported better emotional control,  
14 reduced stress, and greater enjoyment in parenting. The findings suggest that parent-led  
15 approaches like LIPP can support development in children with delays, especially in settings  
16 with limited access to formal therapies.

## 17 **Introduction**

18 Children with developmental delays often experience challenges in social communication  
19 and early interaction. Early support can improve developmental outcomes, but many families  
20 in low-resource settings have limited access to services. Parent-mediated interventions have  
21 become an important way to support children in such contexts. Research shows that when  
22 parents learn structured ways to engage with their children, the progress is often meaningful  
23 and sustainable.

24 The LIPP method was developed to address these needs. It is defined as a parent-mediated  
25 approach that reduces verbal instruction and increases calm, attuned, and child-led  
26 engagement. The method gives importance to the parent's emotional state. When parents are  
27 regulated and present, the child responds with better attention and interaction. This case study  
28 describes how the LIPP method was used with one child and how both the child and parents  
29 changed over time.

## 30 **Case Description**

31 The child was born on 01.04.2022. At 2.6 years of age, the child showed limited social  
32 communication, irritability, reduced response to name, and withdrawal from people. A  
33 neurologist was consulted and medication was given, but there was little improvement. The  
34 child also received some speech and occupational therapy, which showed minimal change.

35 The parents reported stress, confusion, and concern about the child's behaviour and overall  
36 development. They sought an approach that involved them directly and addressed daily  
37 interactions at home.

## 38 **Methodology**

### 39 **Intervention Structure**

40 The intervention lasted three months and included twelve online sessions.

- 41 • Five group sessions focused on learning the ideas of the LIPP method and sharing  
42 experiences with other parents.
- 43 • Seven individual sessions focused on personal feedback, video observation, and  
44 guided practice.

### 45 **Theoretical Basis of the LIPP Method**

46 The LIPP method is influenced by three ideas.

- 47 1. Affective attunement, which highlights the value of shared emotion and calm  
48 presence in early interaction.
- 49 2. Parallel play, where the child and parent use similar objects or activities without  
50 instructions.
- 51 3. Naturalistic learning, where everyday routines and interactions are used for teaching.

### 52 **Structure of the LIPP Method**

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54 Parent Emotional Stability → Joyful Non-Verbal Engagement → Child Attention → Child  
55 Participation → Developmental Gains.

56 The method has two phases.

#### 57 **Phase 1: Parent Preparation and Emotional Stability**

58 Parents work on their own emotional regulation. They practice staying calm, using simple  
59 routines, smiling more, and reducing pressure during interaction. They also learn to use facial  
60 expressions, gestures, and simple sounds more often than verbal commands. The focus is on  
61 creating a positive emotional climate.

#### 62 **Phase 2: Parent-Child Engagement**

63 Parents follow the child's lead in play. They use identical toys and simple activities. They  
64 reinforce the child's actions and reduce unnecessary instructions. They also learn to ignore  
65 minor disruptive behaviours without reacting. The goal is to support the child's natural

66 attention and participation through a low-pressure, predictable, and joyful style of  
67 engagement.

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## 69 **Data Collection**

70 Information was collected through

- 71 • Parent interviews: Assessed changes in parental well-being and perceptions of child  
72 behaviour.
- 73 • Video observations: Monitored parent-child interaction in home settings.
- 74 • Self-developed linear scale: Pre- and post-intervention assessment of child skills (0–6  
75 scale).

## 76 **Outcome Measures**

- 77 • Child outcomes: Attention span, joint attention, engagement, social interaction, self-  
78 initiation, receptive and expressive language skills, and reduction in challenging  
79 behaviours.
- 80 • Parent outcomes: General health, relaxation/calmness, enjoyment in parenting, and  
81 perceived support system.

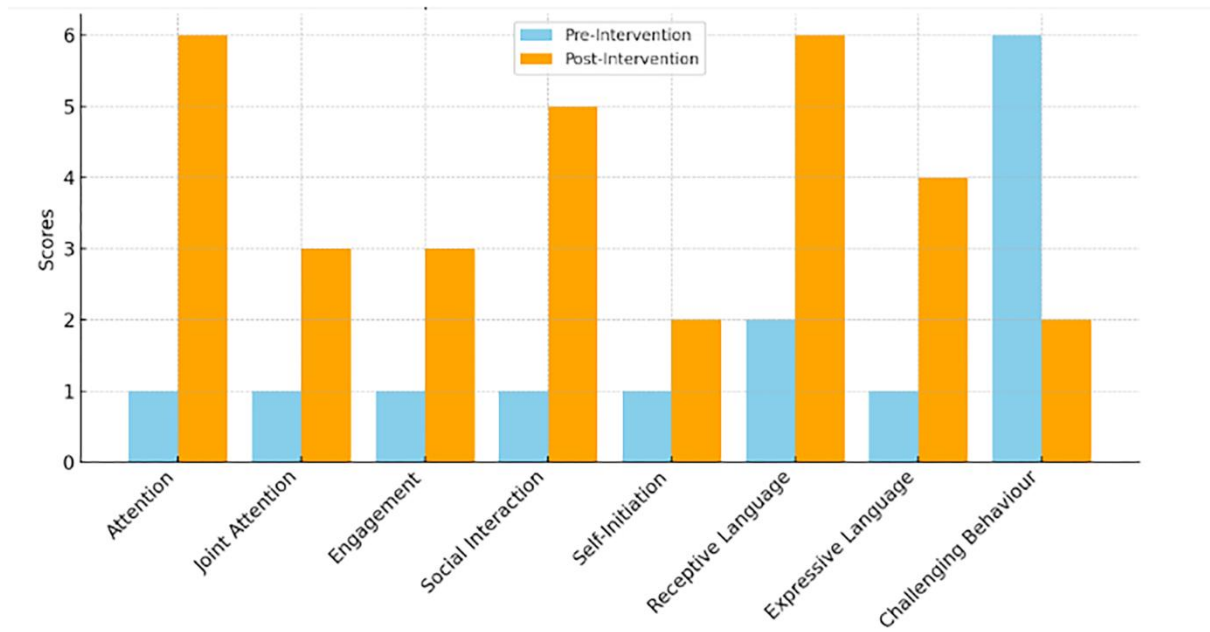
## 82 **Results**

83 The child showed improvement in all target areas. The most visible changes were in attention  
84 span, receptive language, social interaction, and reduction in challenging behaviour. The  
85 parents also showed improvement in calmness and confidence. Their enjoyment in parenting  
86 increased. Their sense of having a support system also improved.

87 **Table 1: Child Development Outcomes: Pre- and Post-Intervention (LIPP Method)**

<b>Domain / Skill</b>	<b>Pre-Intervention Score</b>	<b>Post-Intervention Score</b>	<b>Improvement (%)</b>
Attention Span	1	6	50%
Joint Attention	1	3	25%
Engagement	1	3	25%
Social Interaction	1	5	40%
Self-Initiation	1	2	15%
Receptive Language Skills	2	6	40%
Expressive Language Skills	1	4	30%

Domain / Skill	Pre-Intervention Score	Post-Intervention Score	Improvement (%)
Challenging Behaviours	6	2	40% reduction



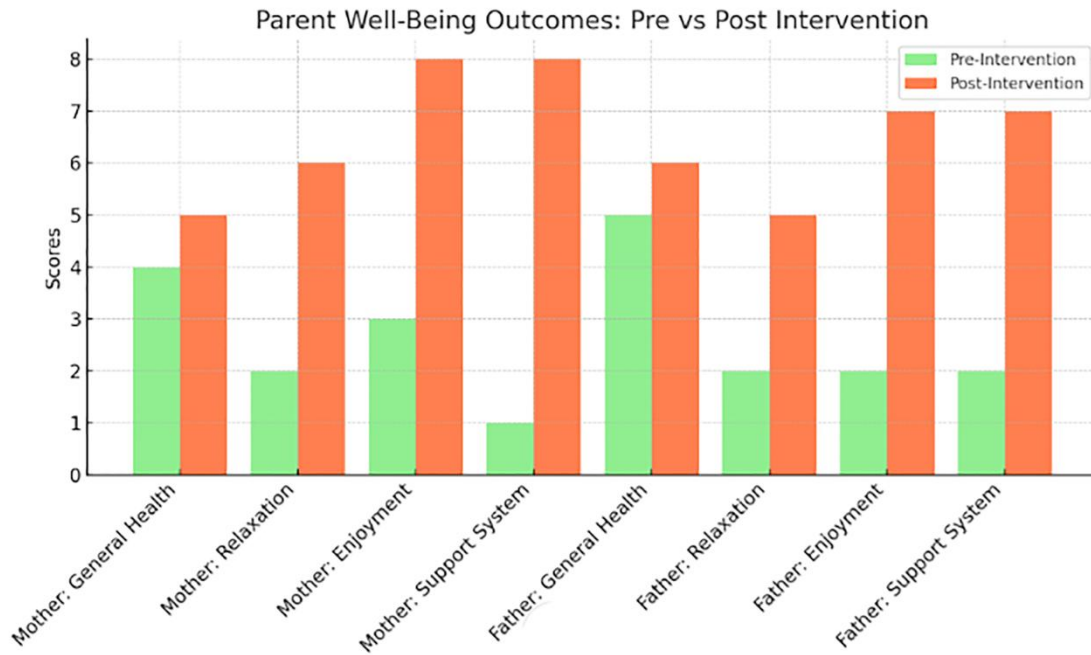
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90 **Table 2: Parent Well-Being Outcomes: Pre- and Post-Intervention**

Parent Domain / Indicator	Pre-Intervention Score	Post-Intervention Score	Improvement (%)
Mother General Health	4	5	25%
Relaxation / Calmness	2	6	67%
Enjoyment in Parenting	3	8	67%
Support System Perception	1	8	88%
Father General Health	5	6	20%
Relaxation / Calmness	2	5	50%
Enjoyment in Parenting	2	7	71%
Support System Perception	2	7	71%

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## 94 Discussion

95 This case study shows that a structured parent-mediated approach can support development  
 96 in young children with delays. The LIPP method helped the parents become more  
 97 emotionally regulated and more aware of the child's cues. As parents became calmer and  
 98 more responsive, the child showed better attention and participation. This supports existing  
 99 research on parent-mediated interventions, which highlights the link between parental  
 100 behaviour and child outcomes.

101 The LIPP method is different from many instruction-based approaches because it reduces  
 102 verbal commands and focuses on emotional presence. The simple structure of the method  
 103 makes it suitable for families in low-resource settings. It can be used at home without  
 104 specialised materials.

105 The main limitation of this study is that it describes only one child. A larger sample is needed  
 106 to examine the method more systematically. Still, the findings offer early evidence that LIPP  
 107 can be a useful model for parent-child engagement and early intervention.

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## 109 Comparison with Existing Models

- 110 • LIPP reduces verbal instruction significantly more than NDBI or Hanen.
- 111 • LIPP emphasises emotional presence before behaviour training, an approach also  
 112 noted in DIR/Floor-time.

- 113 • LIPP introduces structured parallel engagement using identical toys, similar to social  
114 play frameworks.

## 115 **Limitations**

- 116 • Single-case design limits generalisability  
117 • Measurement tools were self-developed  
118 • No control group  
119 • Short intervention duration

## 120 **Future Scope**

- 121 • Multi-case studies  
122 • Randomized controlled studies  
123 • School-based LIPP implementation in inclusive classrooms  
124 • Training modules for mothers' groups, ASHA workers, and Anganwadi centres

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## 126 **Conclusion**

127 The LIPP method supported progress in both the child and the parents. The child showed  
128 improvement in several developmental areas. The parents reported better emotional control  
129 and a more positive relationship with their child. Parent-focused methods like LIPP can be  
130 helpful where access to therapy is limited. They also empower families to play an active role  
131 in their child's development. Future work should examine the method with more children and  
132 in different settings.

133 To have an idea of psychological acculturation from a broader perspective, one may go  
134 thorough Jayanta Bhattacharya's recently published book.

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