

Parent involvement in language intervention: Evidence and methods

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Language development in the early years

is associated with

1. The quality of the interaction
2. The quality of language input
3. The quantity of language input
4. The use of language learning support strategies

Roberts & Kaiser (2011) for a review

What is language intervention?

To provide MORE and BETTER quality INTERACTION and INPUT than the child normally receives in order to make language easier for him or her to learn

Who can provide language intervention?

- Speech-language therapists
- Teachers
- Parents (and caregivers)

Why do we involve parents?

1. They know their child best
2. They are a constant in their child's everyday life and know what makes him or her tick
3. They are there for the really meaningful parts of the daily routine
4. They spend more time talking and interacting with their child than a therapist every can

(Lowry, 2017)

What roles can parents play?

- Parent as observer
- Parent as assistant
- Parent as primary interventionist (ST as coach)

Stephen & Manning (2017)

Parent-implemented language intervention (PILI): a triadic model

- Parent as primary interventionist
 - Speech-language therapist → parent → child
1. The SLT teaches the parent specific interaction and language input strategies for use with his/her child
 2. The parent uses the strategies when interacting with his/her child
 3. The child's language improves as a result

Klatte & Roulstone (2016)

A meta-analysis of PILI

18 studies published between 1980-2010 on parent-implemented interventions for children between 18 and 60 months of age with primary and secondary language impairments (Roberts & Kaiser, 2011).

Does PILI change the parent's interaction and language input positively?

Parent versus control				
	<i>g</i>	95% CI	<i>p</i>	<i>n</i>

Adult measures

Parent responsiveness	0.73	[0.26, 1.20]	.00	7
Rate	0.26	[-0.13, 0.64]	.19	5
Use of language models	0.38	[-0.03, 0.80]	.07	5

- Ten studies
- The answer is yes: a positive effect size favoring parent-implemented intervention on all measures. The effect was only statistically significant on parent responsiveness and use of language models

Is PILI effective?

	Parent versus control			
	<i>g</i>	95% CI	<i>p</i>	<i>n</i>
Child measures				
Overall language	0.45	[−0.02, 0.92]	.06	7
Expressive language	0.61	[0.00, 1.21]	.05	7
Receptive language	0.35	[0.05, 0.65]	.02	7
Expressive vocabulary	0.48	[0.24, 0.73]	.00	14
Receptive vocabulary	0.38	[0.10, 0.66]	.01	5
Expressive morphosyntax	0.82	[0.37, 1.38]	.00	7
Rate	0.51	[0.18, 0.84]	.00	9

- The answer is yes: a positive effect favoring the parent-implemented group on all measures. The effect is statistically significant on all measures except overall language ($p = .06$)

Is PILI more effective than SLT- implemented language intervention?

	Parent versus therapist			
	<i>g</i>	95% CI	<i>p</i>	<i>n</i>
Child measures				
Overall language	0.24	[−0.26, 0.73]	.35	5
Expressive language	0.25	[−0.43, 0.93]	.47	4
Receptive language	0.41	[0.08, 0.76]	.02	5
Expressive vocabulary	0.14	[−0.25, 0.54]	.69	4
Receptive vocabulary	0.19	[−0.26, 0.64]	.41	2
Expressive morphosyntax	0.42	[0.06, 0.79]	.02	7
Rate	−0.15	[−0.56, 0.27]	.48	3

- The answer is yes: positive effect favoring the parent-implemented group on all measures except the rate of communication. The effect however is statistically significant for receptive language and expressive syntax.

What do we NOT know about PILI?

- How accurate do the parents implement the taught procedures?
- How are the parents trained and for how long (9-36 hours with a mean of 26 hours) for intervention to be effective?
- Who provided the training? What is the frequency and the duration of the training?
- What interaction and input strategies are taught to parents?
- What are the characteristics of the parents (e.g., education level)?
- Does parent-implemented language intervention work with children with different profiles of language disorders?

- Is the effect of parent-implemented language intervention equally effective for receptive and expressive language? (current analysis reveals larger for expressive)
- Does the child's language gain maintain over time? (only four studies included this, the answer was generally yes)
- Do the parents used the interaction and language input strategies over time, long enough for the child to make gains?
- Is the parent-implemented language intervention viable in routine therapy practice?
- Does parent-implemented language intervention work in the Chinese culture where professionals are often seen as the expert?
- Does the benefit outweigh the cost?

Limitations of the meta-analysis

1. the number of children included in the studies is small
2. the studies are of varying methodological rigor
3. the number of studies included in the meta-analysis is small
4. the majority of parents is from the middle class and all parents volunteered to participate

What the challenges with PILI?

1. The parent's engagement, understanding, ability to reflect
2. The parent's availability to attend sessions
3. The parent's use of the strategies at home with the child with sufficient frequency and accuracy
4. The SLT's skills with parent training

Klatte & Roulstone (2016)

Evidence-based practice: E³BP

1. External evidence from systematic research
2. Evidence internal to clinical practice, and
3. Evidence concerning the preferences of a fully informed patient

(Dollaghan, 2007, p. 2)

The caveat and some recommendations

Success of the PILI can very much dependent on the family (Klatte & Roulstone, 2016)

- The SLT and the parent discuss which is the best role to play
- The SLT and the parent work as partners

Are there other ways we can involve parents in early language intervention?

- setting goals
- describing daily activities and routines
- learning interaction and language input strategies
- reporting changes and progress of your child
- determining next steps

Lowry (2017)

Interaction and language input strategies which parents can learn

Weitzman (2017)

First, be Face to Face

Then, **O**bserve

Wait

Listen

Weitzman (2017)

1. Imitating
2. Interpreting
3. Commenting

(Avoid asking too many “testing” questions)

Weitzman (2017)

Turn-taking

- Matching the child's turn (the parent's turn as about the same length as the child's, on the same topic as the child's)
- Cueing the child to take a turn (initiation)

Weitzman (2017)

- Turning familiar routines into opportunities for the child to communicate

S Start the same way each time

P Plan the child's turn

A Adjust the routine so the child can take a turn

R Repeat the same actions, sounds and words each time

K Keep the end the same

Weitzman (2017)

Be responsive to the child's communication attempt, engage in joint attentional focus with the child

1. Adding language to build the child's understanding
2. Highlighting the language to emphasize what the child says
3. Using a slower rate of speech and pausing at meaningful units
4. Expanding the child's message

Contexts and activities for parents to use these interaction and language input strategies

Using contexts and activities that fit naturally into what is happening in the child's day: during play and everyday routines

nothing highly prepared, the focus is on intervention strategies. Parents are busy.

How to help parents provide MORE and BETTER quality interaction and language input?

Empowerment (Dempsey & Dunst, 2004)

1. help parents gain skills
2. feel confident in using these skills within their daily life.

This is a priority, not a secondary task, nor an afterthought.

What?

Demonstrate the strategies

Explain what they are doing

Explain why they are doing what they are doing

How?

parent workshops. Videos, manuals, and/or coaching and feedback)

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Thank you!

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