

# Parental Stress and Participation Among Children with Hearing Impairment

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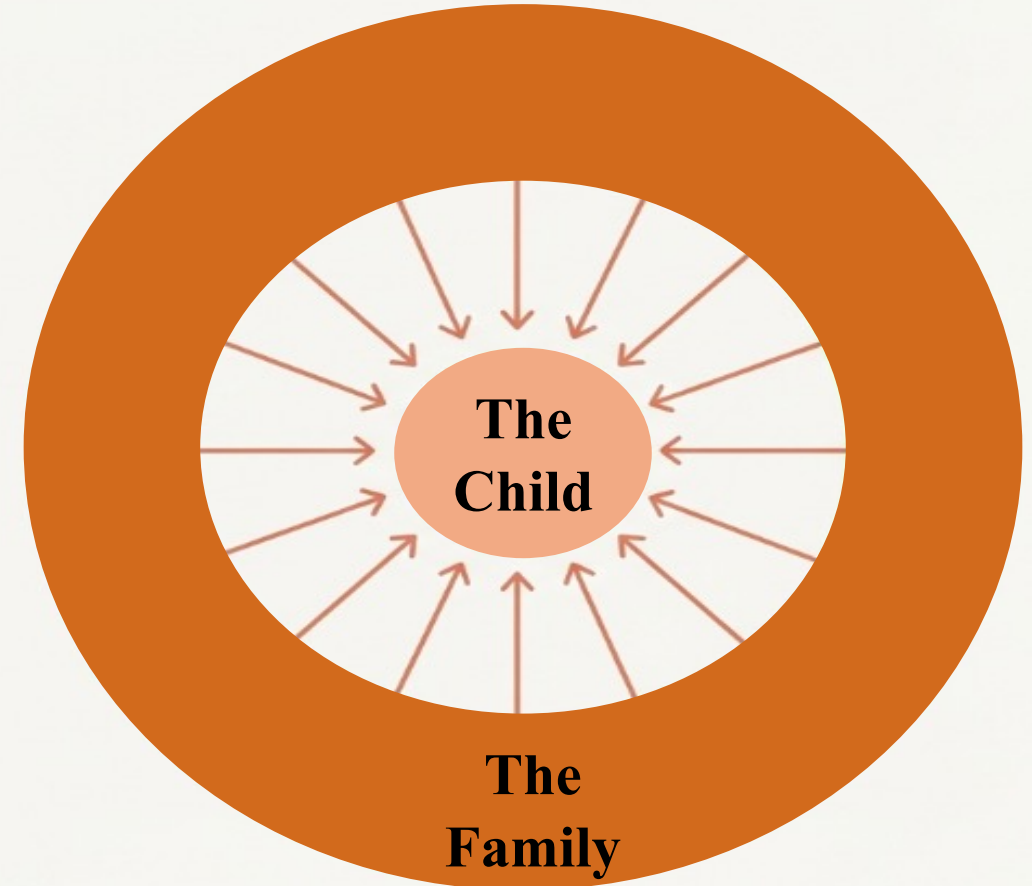


The family constitutes the primary and natural environment in which a child develops.

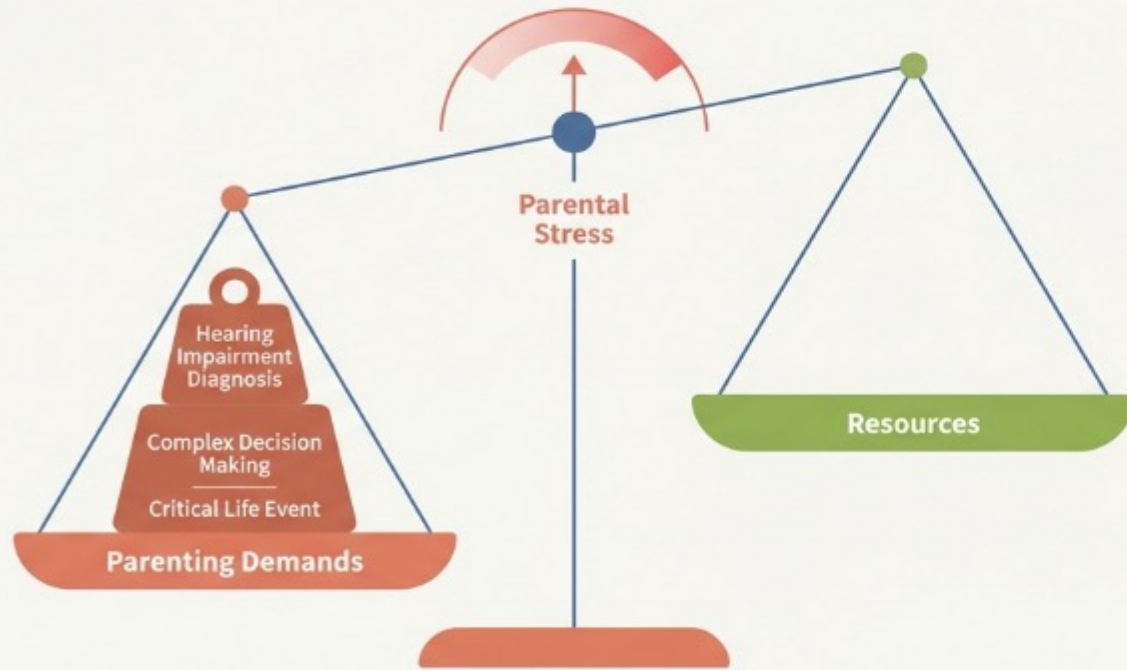


Parents play a central role in:

1. Shaping the child's daily life and development
2. Facilitating the child's participation in meaningful activities.

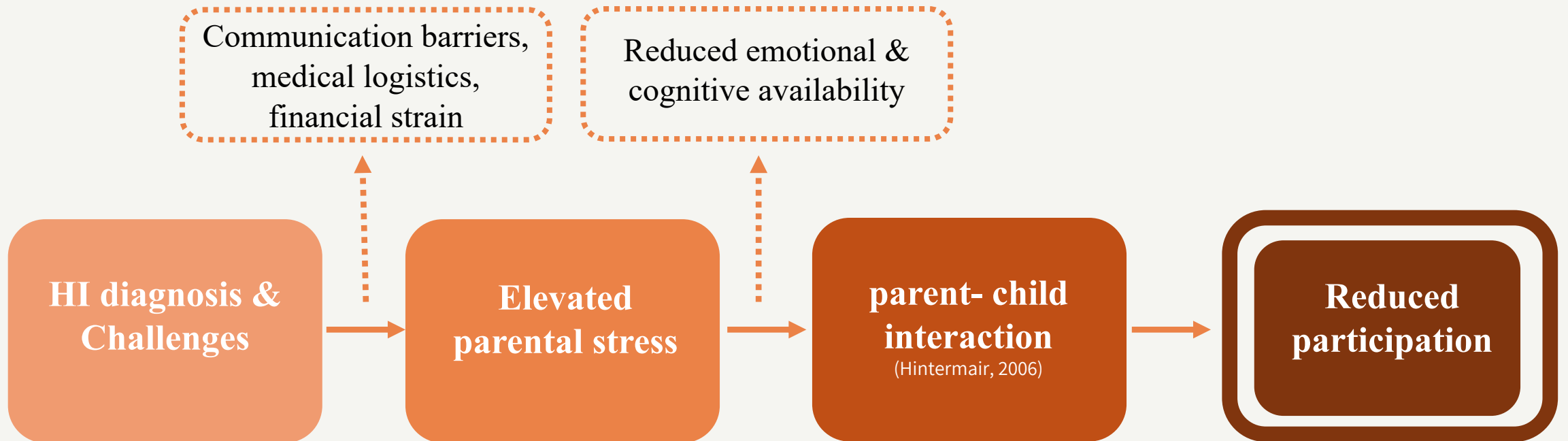


# Hearing impairment (HI) & Parental stress



- **HI:** The most common sensory disability in childhood, Often presents functional and participation challenges.
- The diagnosis serves as a critical life event, placing families in complex decision-making situations.
- **Parental stress:** A psychological state of tension in response to parenting demands (Abidin, 1983) and influenced by both child-related and parent-related factors.
- Parents of children with HI report higher levels of parental stress compared to parents of hearing children (Dirks, 2018).

# How does stress limit participation?



Parental stress is not merely a psychological strain; it is a functional barrier that negatively affects children's participation

# Rationale

**Research on parental stress among children with HI is limited, particularly within occupational therapy.**

**Limited evidence exists regarding the contribution of parental stress to children's participation**

# Objectives

<b>1 COMPARE</b>	<b>2 CORRELATE</b>	<b>3 PREDICT</b>
Examine differences in parental stress and participation between children with HI and typical hearing.	Investigate the relationship between parental stress levels and child participation scores within the HI group.	Determine if parental stress is a significant predictor of participation.

## Hypotheses:

**1**

Significant differences will be found between the groups in parental stress and participation scores.

**2**

Different correlations will be found between the assessments among the study group.

**3**

Parental stress will significantly predict children's participation among the study group.

# Methods

## Study population (N=90)

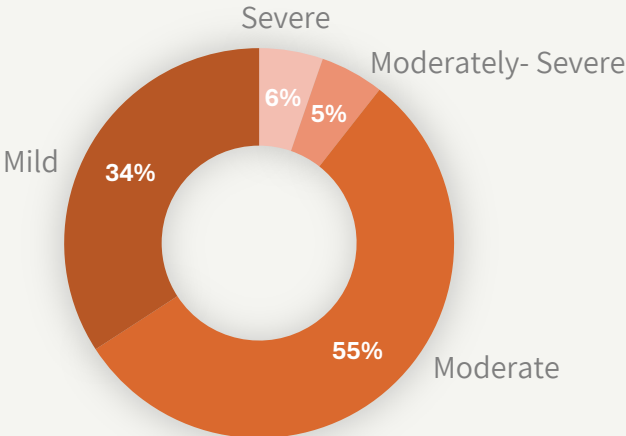


**Study group (N=45)**  
Children with hearing impairment  
Mean age:  $9.39 \pm 1.44$   
21 Boys, 24 Girls

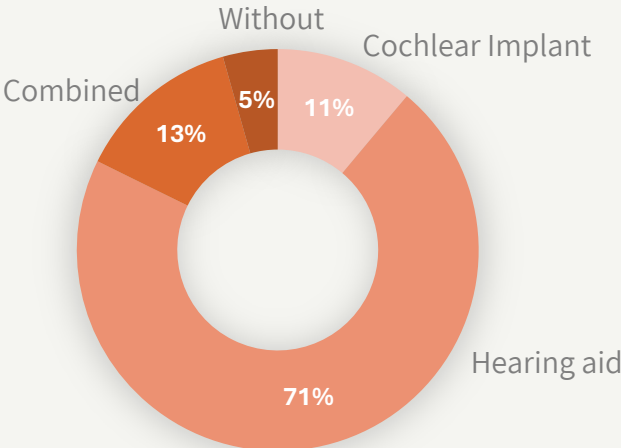
Groups matched  
by age and gender.  
Regular education  
schools



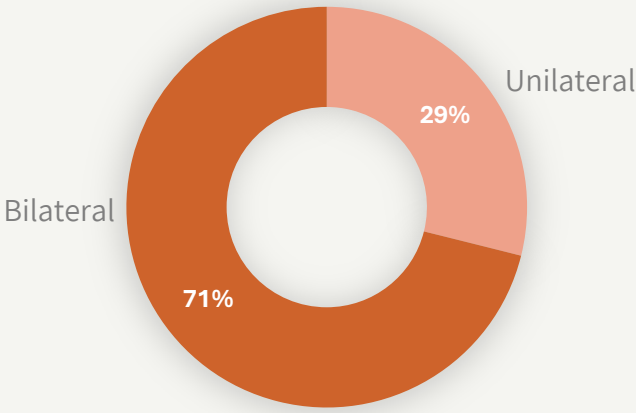
**Control group (N=45)**  
Children with typical hearing  
Mean age:  $9.01 \pm 1.35$   
23 Boys, 22 Girls



Severity of HI



Device type

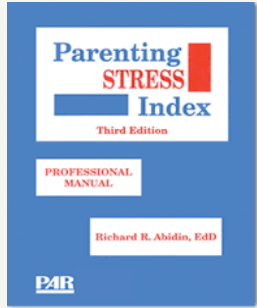


Side of HI

Exclusion criteria : severe/chronic physical/mental health conditions



# Parenting Stress Index - Short Form (PSI-SF) (Abidin, 1995)



- Parent report questionnaire
- Assesses **parental stress**

- Children aged 1 - 12 years
- 36 items, rated on a 5-point Likert scale
- 10- 15 minutes administration time

## 1. Parental Distress (PD)

Stress related to the parenting role  
(Reduced competence, role restrictions, limited support)

## 2. Parent–Child Dysfunctional Interaction (P-CDI)

Parent’s perception of the child as not meeting expectations and of interactions as non-rewarding

## 3. Difficult Child (DC)

Parent’s evaluation of the child’s behavioral characteristics that affect parenting.

## Scoring

- Total stress score and subscale scores.
- Higher scores indicate higher parental stress

	1	2	3	4	5
1. I often feel that I cannot handle situations very well.	MA	A	NS	D	MD
2. I find myself giving more of my life to meet my child's needs than I had expected.	MA	A	NS	D	MD
3. I am caught up with the responsibilities of being a parent.	MA	A	NS	D	MD
4. Since my son was born I have not been able to do anything new or different.	MA	A	NS	D	MD
5. Since having my son I find that I almost never get to do the things I wish I could do.	MA	A	NS	D	MD
6. I'm not happy with the clothes I bought last time.	MA	A	NS	D	MD

Subscales



# Participation and Environment Measure for Children and Youth (PEM- CY) (Coster et al., 2010)

- Parent-report questionnaire
- Children and adolescents aged **5-17** years, with and without disabilities
- Assesses children's **participation and environmental factors**
- 20-30 minutes administration time

The image shows a sample of the PEM-CY questionnaire. It features a grid with 10 rows of items and 3 columns for recording responses. The items are categorized into sections: 'HOME Participation', 'Computer and other games', 'School and other places', 'Involvement in community, social, and leisure', 'Working, TV, videos, and DVDs', 'Spending time with other people', 'Spending time with family', 'Spending time with friends', 'Spending time with other people', 'Spending time with other people', 'Spending time with other people', and 'Spending time with other people'. The grid is currently empty, with a large 'SAMPLE PAGE' watermark overlaid.

## Settings

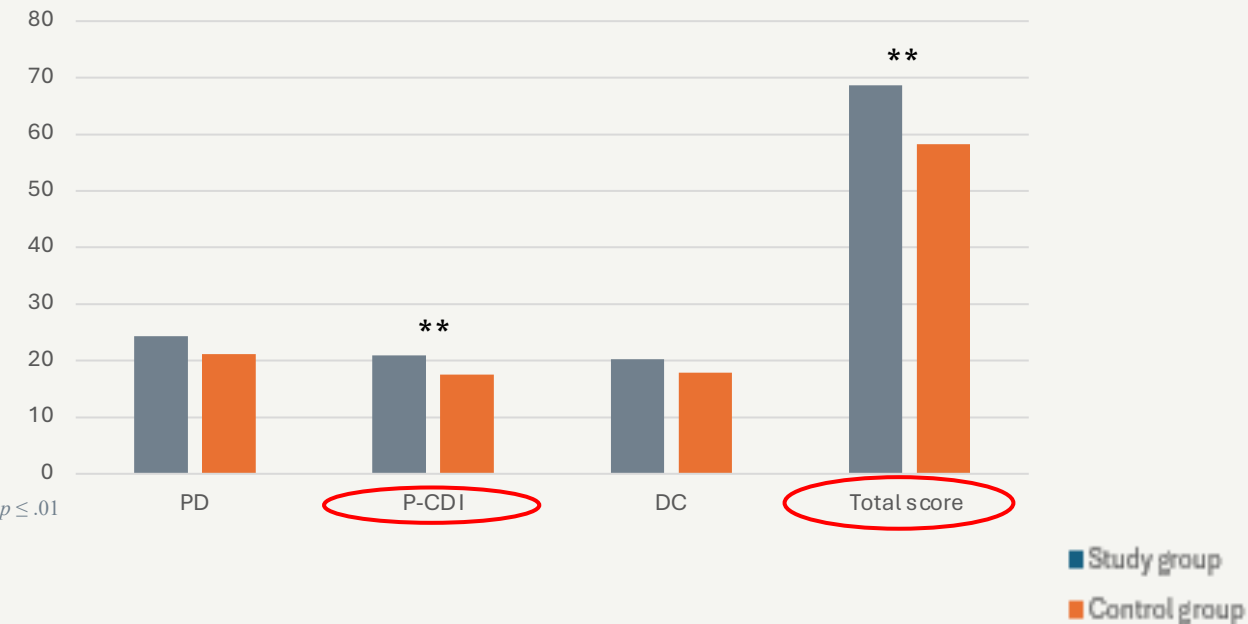
- **Home** (10 items)
- **School** (5 items)
- **Community** (10 items)

## Scores

- Number of activities (Diversity)
- Participation frequency
- Level of involvement
- Desire for change

# Result 1: Significant Differences in Parental Stress and Participation

## Parental Stress (PSI)



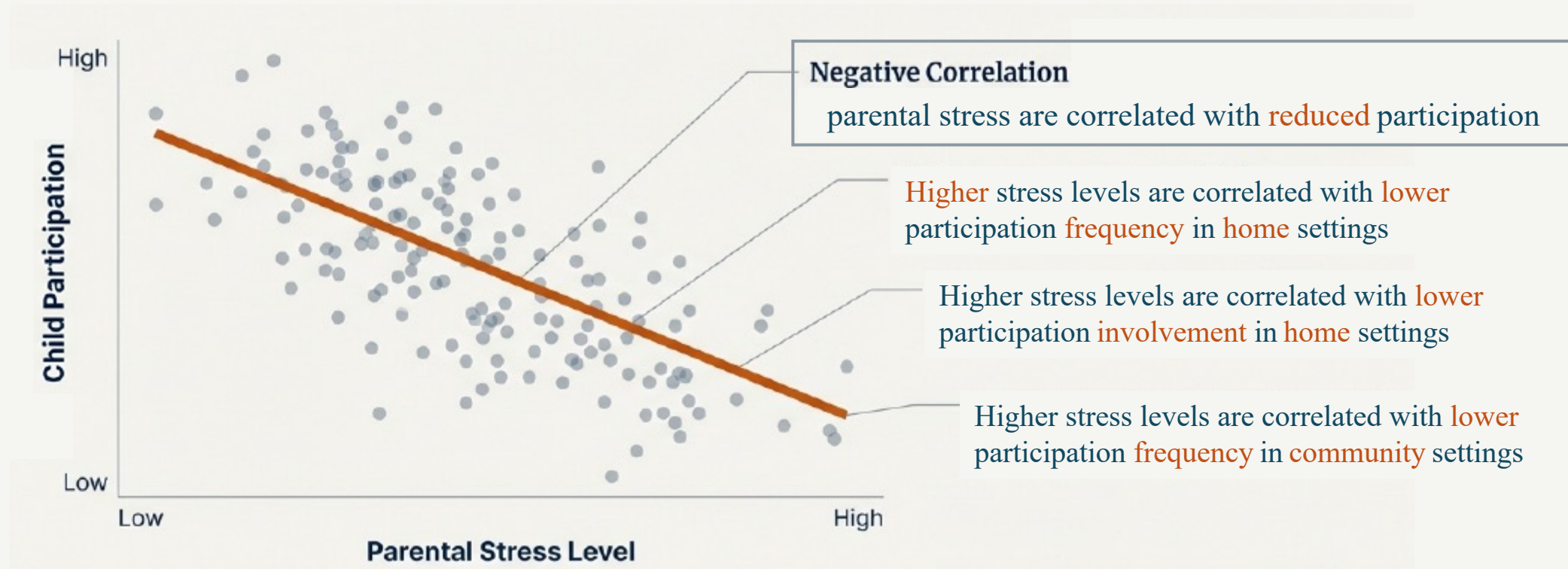
## Participation (PEM-CY)



Significant higher parental stress among parents of children with HI, especially in P-CDI subscale and total score

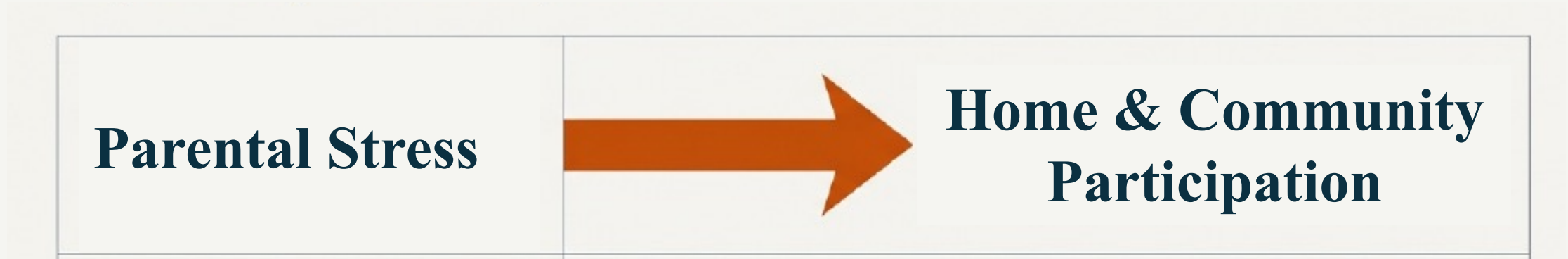
Significant reduced participation across daily settings among HI group:  
*Fewer activities, lower frequency, and reduced involvement*

## Result 2: Significant Correlations Between PSI and PEM-CY Scores Among The HI Group



Higher stress levels are correlated with **higher** parental “**desire for change**” in **community**

### **Result 3: Parental Stress as a Predictor**

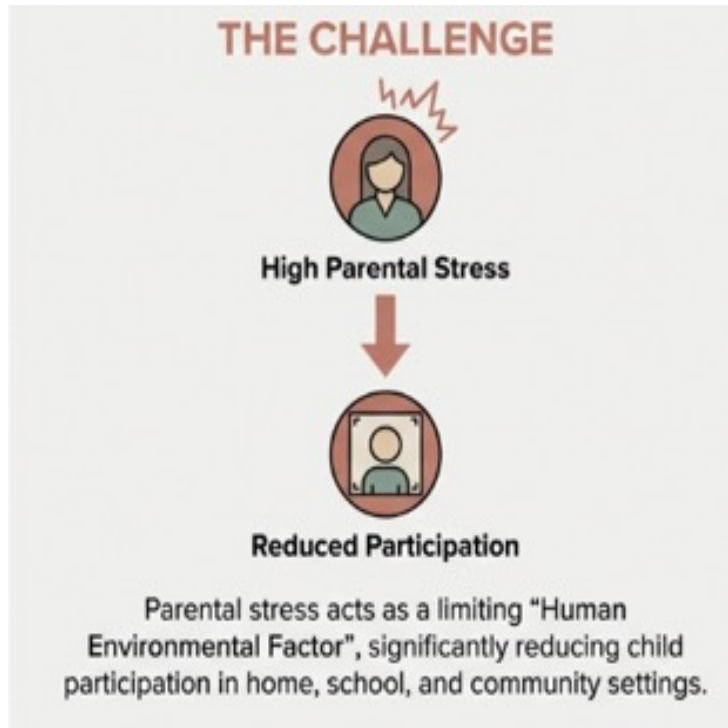


**In contexts in which parents serve as mediators (home and community), parental stress becomes a central determinant of children’s participation.**

# Conclusion:

## Parental Stress

Influences family functioning and child participation across daily contexts



**Family-centered occupational therapy should integrate parental stress into assessment and intervention due to its impact on children's participation in HI.**



**Combining participation-focused tools (PEM-CY) with parental stress measures provides valuable ecological insight into children's functioning.**

**Occupational therapy interventions that support parents and reduce parental stress may enhance children's participation in daily life and improve quality of life.**

# Thank you for your attention

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