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### How do activity contexts affect parent-child interaction?

Reporting results from a scoping review and implications for PCI intervention.

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### Overview

Intervention for children at risk of DLD often focusses on parent-child interaction (PCI)

Observations of PCI have not always considered the effect of activity

This scoping review explored studies of parentchild language across activity contexts

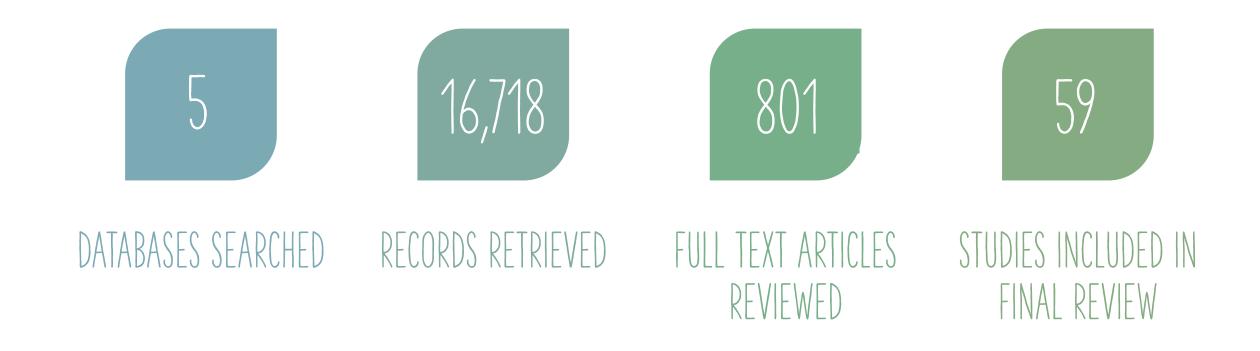
# Background

- Evidence for PCI interventions comes from observations of typically developing children and their parents (Leadbeater & Litosseliti, 2014)
- Studies have not always reflected children's real-life interactions and activities (Wang et al., 2020)
- Recommendations suggest that PCI should fit into families' everyday routines and activities (O'Toole, Lyons & Houghton, 2021)
- **Aim:** To explore the range of existing literature about variation in linguistic outputs of parents and their preschool children during different activity contexts

### Method

- Scoping review selected as appropriate for broad research objective (Tricco et al. 2018)
- Followed Joanna Briggs Institute methodology (Peters et al. 2020)
- Eligibility criteria for inclusion:
  - ✓ Participants = parent/carer and typically developing child (age 1;0 5;11)
  - ✓ Parent and/or child language recorded and analysed
  - ✓ Comparison made across or within activity contexts

# Data Extraction



# Results - Population

Total studies - 60 (1 article included 2 studies)

#### Children

Age

 Most often included 12-23 month old children (31 studies) and 24-35 month old children (29 studies)

#### Parents

Role

 Majority of participants were mothers (89.2%), 10.4% were fathers

Language

- 31 studies included only **Englishspeaking** children
- 17 studies did not specify home language

SES

- 29 studies used mainly mid-high SES participants
- 22 did not provide SES information

Development

- 31 studies **did not specify** definition of 'typically developing'
- 14 studies used a language assessment

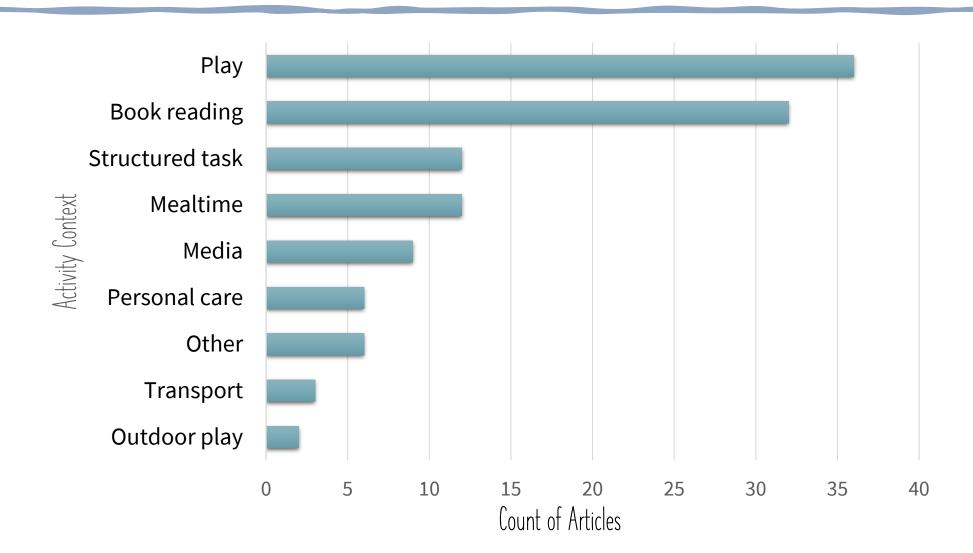
Ethnicity & Culture

- 56.5% of participants were from the USA, 10.4% were from the UK
- 84.7% of participants were of **Caucasian** ethnicity

# Results - Linguistic Outputs

- 36 studies analysed linguistic outputs for both parent and child
- 21 studies considered parent linguistic output only and 3 child outputs only
- The linguistic outputs most frequently included in studies were:
  - ➤ Total number of words/utterances (61.7%)
  - ➤ Purpose of language (e.g. describe, elaborate, request) (53.3%)
  - ➤ Type-token ratio (43.3%)
  - ➤ Mean length of utterance (41.7%)

# Results - Frequency of Activity Contexts



# Results - Activity Context Comparison

	Play	Book reading	Structured task	Mealtime	Outdoor play	Transport	Media	Personal care	Other
Play	10								
Book reading	17	6							
Structured task	4	4	3						
Mealtime	10	8	4	0					
Outdoor play	1	1	2	1	0				
Transport	2	2	1	2	1	1			
Media	3	5	1	1	1	1	1		
Personal care	6	4	1	4	1	2	1	0	
Other	2	3	1	1	1	1	3	1	1

# Results - Methodology

Study Design	%
Structured only	56.7%
Semi-naturalistic only	28.3%
Naturalistic only	10.0%
Comparison study	5.0%

Location	%
Child's home	48.3%
Research lab	30.0%
Other	13.3%
No information	8.3%

Method of recording	9/0
Video or audio recorded	93.3%
Remote recording device (e.g. LENA)	6.7%

### Themes

- Key areas of study:
- 1) Play activities
- 2) Book reading
- 3) Naturalistic routines
- 4) Media
- 5) Methodological Implications
- Results were varied and depended on factors like study design (e.g. Sorsby & Martlew, 1991; Fraser & Roberts, 1975)
- Language varied according to how parents viewed and structured an activity (e.g. Doering, Schluter & Suchodoletz, 2020; Flynn & Masur, 2007)

### Conclusions

- Most studies used structured, researcher-directed designs
- Diversity was limited, reflecting the sampling bias in developmental research (Nielsen et al, 2017)
- How an activity is structured and its meaning vary across family contexts (Tamis-leMonda et al., 2003)

### What does this mean for PCI interventions?

- We should reflect on gaps in the evidence base about children's everyday interactions
- Daily activities and interaction during everyday routines vary within and across families
- Future research and intervention could include consultation with parents about their family's naturally occurring communication opportunities

## References

- Doering, E., Schluter, K. and Suchodoletz, A. Von (2020) 'Features of speech in German and US-American mother-toddler dyads during toy play and book-reading', *Journal of Child Language*, 47(1), pp. 112–131.
- Flynn, V. and Masur, E. F. (2007) 'Characteristics of maternal verbal style: Responsiveness and directiveness in two natural contexts', *Journal of Child Language*, *34*(3), pp. 519–543.
- Fraser, C. and Roberts, N. (1975) 'Mothers' Speech to Children of Four Different Ages.' Journal of Psycholinguistic Research 4 (1): 9–16.
- Leadbeater, C. and Litosseliti, L. (2014) 'The importance of cultural competence for speech and language therapists', *Journal of Interactional Research in Communication Disorders*, *5*, pp. 1–26.
- Nielsen, M. et al. (2017) 'The persistent sampling bias in developmental psychology: A call to action', *Journal of Experimental Child Psychology*, 162, pp. 31–38.
- O'Toole, C., Lyons, R. and Houghton, C. (2021) 'A Qualitative Evidence Synthesis of Parental Experiences and Perceptions of Parent–Child Interaction Therapy for Preschool Children With Communication Difficulties', *Journal of Speech, Language, and Hearing Research, 64*, pp. 3159–3185.
- Peters, M. D. J. et al. (2020) 'Updated methodological guidance for the conduct of scoping reviews', *JBI Evidence Synthesis*, *18*(10), pp. 2119–2126. Sorsby, A. J., and Martlew, M. (1991) 'Representational Demands in Mothers Talk to Preschool Children in Two Contexts: Picture Book Reading
- and a Modelling Task'. *Journal of Child Language 18* (2): 373–95.
- Tamis-LeMonda, C. S. (2003) 'Cultural perspectives on the "Whats?" and "Whys?" of parenting', *Human Development*, 46(5), pp. 319–327.
- Tricco, A. C. et al. (2018) 'PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation', *Annals of Internal Medicine*, 169(7), pp. 467–473.
- Wang, Y. et al. (2020) 'A meta-analysis of the predictability of LENATM automated measures for child language development', *Developmental Review*, 57(May)