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Mapping the literature on parent-child language across activity contexts: a scoping review

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ABSTRACT

Linguistic interactions between parents and their children are frequently studied to investigate how children acquire language. From observations, researchers have identified interaction strategies that foster children's language development. In turn, interventions to support children's early language skills employ styles of interaction derived from these observations. However, researchers have not often considered how the activity context selected for observation may affect the language used, or whether these contexts reflect children's diverse experiences.

The aim of this scoping review was to explore the breadth of literature about language use across a range of activities. Included studies described linguistic outputs of parents and typically developing children (aged 1;0–5;11 years) and activity context(s). Searches were conducted in PsycInfo, Medline, CINAHL, ERIC-ProQuest and Google Scholar.

From 16,718 records, 59 studies were retained. Studies were charted according to the population included, linguistic outputs recorded, activity contexts studied and the methodological design. To allow for comparison of results across activity contexts, five thematic categories were identified: play activities, book reading, naturalistic routines, media and methodological implications. Challenges for future research are discussed, including ways to ensure the ecological validity of findings by coupling naturalistic language recordings with data collected during diverse everyday activity contexts.

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Activity context; language development; parent-child; preschool

1. Introduction

For decades, researchers have employed various methods to observe language used during social interactions between parents and children (Bergelson et al. 2019; Nyberg et al. 2020). Data from these observations have been used to construct theories about

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how children acquire language and to highlight how participation in communicative exchanges predicts children's vocabulary development (Zimmerman et al. 2009). Critical to these theories is the understanding that language acquisition is a mutual process (Donnelly and Kidd 2021), with linguistic outputs from both caregiver and child contributing to later lexical development. Theories have in turn been vital in informing early intervention for children who are struggling to acquire language (van Kleeck 1994).

1.1. Methods for studying parent–child language

Historically, psycholinguistic studies have been based on observations of infants and their parents in laboratory settings, engaging in activities selected by researchers for ease of eliciting and recording child language (Yont, Snow, and Vernon-Feagans 2003). While these approaches might be methodologically attractive in reducing potential confounders or distractions, they may not capture children's everyday interactions as they occur at home (Wang et al. 2020). Indeed, Casillas, Brown, and Levinson (2020) note that children's exposure to language ebbs and flows throughout the day during different daily activities.

In recent years, new technologies have been developed to record naturalistic observations in the home using automated recording devices (Bergelson et al. 2019). These methods do not require the researcher to be present, thereby avoiding risks to ecological validity caused by power asymmetries and potential impact on caregiver behaviours (Paugh and Riley 2019; Dudley-Marling and Lucas 2009). These naturalistic recordings are less labour intensive and also provide a large amount of linguistic data which is more reflective of children's day to day experiences (Greenwood et al. 2011).

However, researchers have found that without context, data from naturalistic recordings can be difficult to interpret (d'Apice, Latham, and von Stumm 2019). Kuchirko (2019) argues that for researchers to understand how children acquire language, they must consider naturalistic linguistic interactions in real time and across diverse everyday activities.

1.2. Activity contexts in early intervention

Knowledge of how activity contexts relate to differences in language is vital to speech and language therapists and early years practitioners, who often use interventions based on parent–child interaction (PCI) when working with children with developmental language delays (Roulstone et al. 2015). The evidence suggests that parents are more likely to find PCI interventions acceptable when they are oriented to their family's routines and activities, and consistent with their wider belief systems (O'Toole, Lyons, and Houghton 2021). As Crago (1992, 34) comments, 'without knowing the cultural situations, interactions and interactants in a child's life, the clinician may not be able to structure the situation and the participants in the language-sampling process in an effective way'.

Gaining an understanding of how linguistic outputs vary across activities and interactions can inform intervention. However, reviews to date have focussed on PCI in clinical populations (Blackwell et al. 2014) or how children's home environments and parent behaviours affect language outcomes (Topping, Dekhinet, and Zeedyk 2011). Reviews

have only considered the impact of specific activities like book reading (Manz et al. 2010) or screen time (Madigan et al. 2020). In a recent meta-analysis about the effects of quantity and quality of parental linguistic input on child language skills, Anderson et al. (2021) charted data about the location and context of observations. However, they did not consider potential differences between specific activity contexts, or their effect on child language outputs.

In summary, it is important to understand the current evidence regarding variation in parent and child language use across activities in order to consider how methodological choices could influence findings. Moreover, for interventions to be tailored to individual families, it is important that practitioners understand the range of activities and interactions that children take part in at home. Following the ‘Population, Concept, Context’ framework recommended for scoping reviews (Peters et al. 2020), we defined the ‘population’ of interest as parents and preschool-aged children, the ‘concept’ as their linguistic outputs across different situations, and the ‘context’ as the activities that have been studied. Therefore our research objective was to explore the range of existing literature about variation in linguistic outputs of parents and their preschool children across different activity contexts.

2. Methods

A scoping review methodology was appropriate for our exploratory research objective. Unlike a systematic review, scoping reviews typically do not include quality appraisal or formal synthesis and do not attempt to determine whether study findings are robust or generalisable (Arksey and O’Malley 2005). Instead, scoping reviews ask broad questions to examine the range of available evidence, and to synthesise findings from a body of knowledge that is heterogeneous in methods and discipline (Tricco et al. 2018). The scoping review was conducted in accordance with the Joanna Briggs Institute (JBI) methodology (Peters et al. 2020).

2.1. Eligibility criteria

2.1.1. Population

Study participants were parents/carers with a preschool-age child with typically developing language ability. Preschool age was defined as 1;0–5;11 years, to include an age range at which children have begun to produce identifiable words, but most children globally have not yet started formal schooling (World Bank Group 2020). Studies were excluded if children were bilingual, had an identified speech and language disorder/delay, a history of hearing difficulties, a chronic health condition, other developmental conditions or a congenital birth anomaly.

2.1.2. Concept

Studies were required to record interactions between parents and children and analyse an aspect of the linguistic output. Given that Blackwell et al.’s (2014) systematic review focussed on parent–child interaction literature within a similar age range, accepted outputs were adapted from their findings. These included: quantity of language, for example counts of adult or child words; complexity of language, for example lexical

diversity or mean length of utterance (MLU); dialogue participation, for example number of conversational turns; and syntactic features, such as counts of nouns or verbs.

2.1.3. Context

We included studies that compared language outputs across two or more activity contexts. A comparison could be ‘within-activity’, for example two book reading contexts that differed by book genre, or ‘across-activity’, for example a comparison of play and bath time. Studies were excluded if interactions took place between non-parental caregivers and children in early years settings.

2.1.4. Methodological approaches

We considered any study using a within-group design, to ensure that findings reflected variation in language use by the same participants across different activity contexts. To maintain a minimum standard of studies, papers were only included if they had been published within peer reviewed journals.

2.2. Search strategy

The full search strategy was developed with support from a clinical librarian, optimised in PsycInfo and then adapted for further databases (Supplementary Material 1). Studies published in languages other than English were excluded due to limited resources for translation.

2.2.1. Information sources

The following databases were searched: PsycInfo, Ovid Medline, CINAHL, ERIC-ProQuest and Google Scholar.

2.2.2. Source of evidence screening and selection

Search results were collated, uploaded to EndNote and deduplicated. Titles of studies clearly unrelated to the concept being studied were removed at this point. The first and second authors (CH and SH) independently reviewed 10% of the remaining abstracts to ensure consensus about inclusion, after which CH reviewed all remaining titles and abstracts. At full-text screening, a random sample of 20% of texts were reviewed by SH, with 100% agreement with CH on inclusion or exclusion of the sample. CH was sole reviewer for the remaining full text manuscripts, with consultation with SH for any cases where CH was unclear.

2.2.3. Data extraction

Data were extracted and charted from relevant papers using an extraction form developed according to JBI guidance (Peters et al. 2020), and piloted by CH and SH on four studies (Supplementary Material 2). Thematic categories were developed in advance and then amended iteratively during the charting process, for example additional activity categories were added to better reflect data from the studies.

2.2.4. Analysis and presentation of results

Data were calculated and presented in tables according to the population (participant characteristics), concept (linguistic outputs) and context (activities studied). In most cases a simple binary count was used to calculate the overall frequency of measures. For the population data, where studies had multiple participants who fell into different categories, calculations were made as a proportion of total participants across studies.

Data were also collated according to the methodology, methods of observation and setting that were used. Methodology was categorised as structured (specific instructions or tasks were given), semi-naturalistic (specific activities were selected but participants were free to act as they wished) or naturalistic (participants went about their routines free of constraints).

To present results, studies were first organised into themes. A narrative synthesis approach was then used to collate and describe the main findings of included studies.

3. Results

3.1. Overview of included studies

The PRISMA flowchart in [Figure 1](#) illustrates the full screening process. Of 12,469 unique records, 816 were selected for full text screening. After searching university and clinical library databases and contacting authors via Research Gate, 15 studies could not be retrieved. Of the 801 manuscripts that were screened in full, 59 were selected for inclusion. Reasons for exclusion at full-text level are displayed in [Figure 1](#).

3.2. Review findings

A table with individual details of included studies is provided in Supplementary Material 3. A total of 60 studies were charted, as one article reported two separate studies (Gelman, Chesnick, and Waxman 2005).

3.2.1. Population

Children were evenly split by gender (50.5% were boys). Studies most frequently included children within the 12–23 month age range (31 studies) and 24–35 month age range (29 studies). While 31 studies did not give an explanation of how children were defined as typically developing, 14 studies used a defined language measure such as the Peabody Picture Vocabulary Test. The remainder relied on parent report, general measures of health or researcher screening (five studies each). English was the home language of participants in 31 studies while 13 articles represented participants who spoke additional languages. The child's language was not listed in 17 studies but was also presumed to be English due to university affiliation of authors or location of the study.

Of the parent participants, 89.2% (n=1735) were mothers. In 29 studies all participants were from mid-high socioeconomic status (SES), while 22 studies gave no information about SES. Overall 56.6% (n=747) of participants were from the USA and from Caucasian or European American ethnicities (n=1006, 84.7%). Nine studies did not provide information about ethnicity or cultural background of participants. Full details about child and parent participants can be found in Supplementary Material 4.

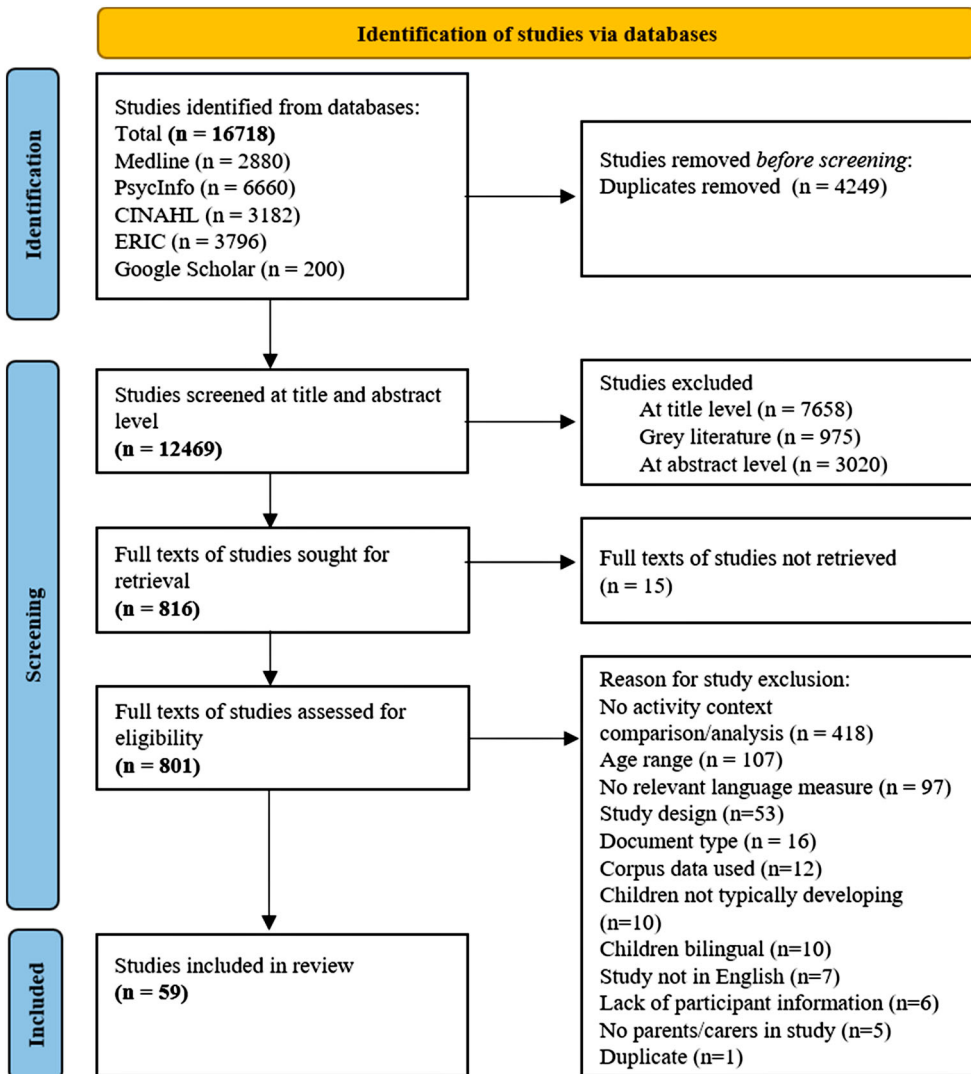


Figure 1. PRISMA flow diagram for article selection.

3.2.2. Concept

Table 1 illustrates the overall frequency of linguistic outputs reported in studies.

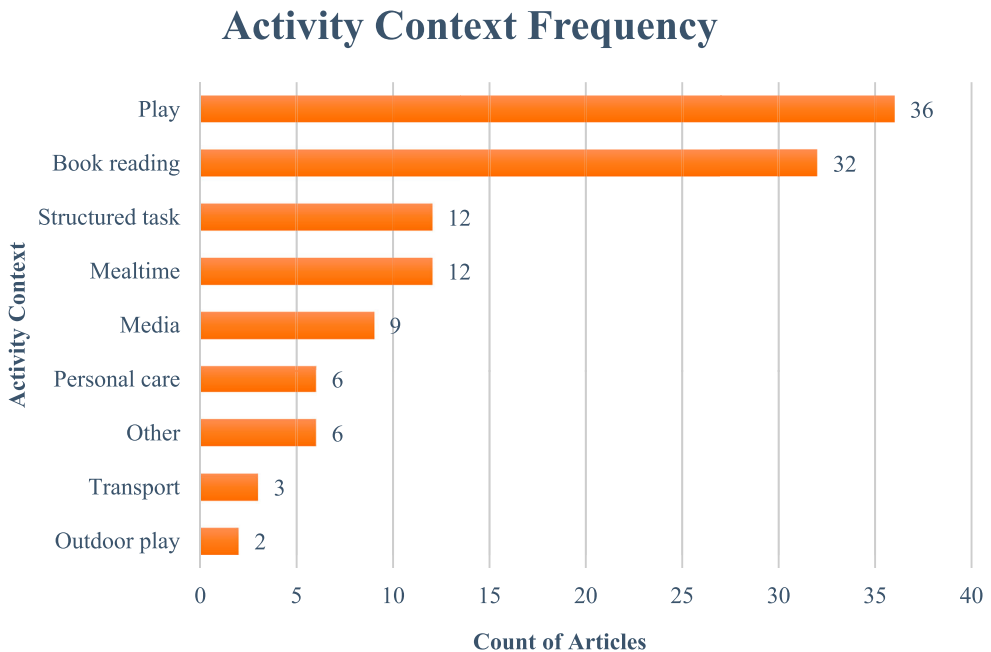
Quantity of language was the most frequent linguistic output reported, with 37 studies including a count of words or utterances. Another frequently reported measure was the purpose of language (32 studies), for example whether parents used language to elaborate or direct. Syntactic variation was less frequently reported, although within this category 13 studies provided a count of syntactic features, most frequently nouns and verbs.

3.2.3. Context

Distribution of activity contexts by frequency is presented in Figure 2. The most frequently studied activity contexts were play (36 studies) and book reading (32 studies).

Table 1. Table of language output measures.

	Count of articles	Percentage of total articles
Participant that measures related to		
Parent	21	35.0%
Child	3	5.0%
Both parent and child	36	60.0%
Quantity of language		
Total words/utterances	37	61.7%
Words/utterances per minute	11	18.3%
Count type/token or type-token ratio (TTR)	26	43.3%
Complexity of language		
Lexical diversity	13	21.7%
Mean length of utterance (MLU)	25	41.7%
Use of abstract language	4	6.7%
Dialogue participation		
Conversational turns/topic continuation	10	16.7%
Purpose of language (describe, elaborate, request etc.)	32	53.3%
Type of communicative act (question, label, etc.)	22	36.7%
Syntax		
Count of syntactic features (e.g. nouns/verbs)	13	21.7%
Grammatical complexity	4	6.7%

**Figure 2.** Chart of activity context frequencies.

Daily routine activities such as mealtime (12 studies) and personal care (six studies), for example dressing or bath time, were less commonly studied than play or structured activities.

3.2.4. Methodological approaches

Overall 34 studies used a structured design. Semi-naturalistic contexts were used in 17 studies and naturalistic designs for six. In addition three studies compared structured and naturalistic study designs to illustrate differences in linguistic outputs across contexts. Observations were most frequently recorded in children's homes (29 studies), followed by university laboratories (18 studies) or in more than one location (seven studies). One study took place in a nursery and five studies did not provide information about location.

The method most frequently used to record parents and children was via videotape (38 studies), while audio-recording was used in eight studies and a combination of video and audio in seven. LENA™ (The LENA Research Foundation 2021) digital language processors were used in three studies and head-mounted cameras in one study. The researcher was present for the observation in 30 studies, absent in 16 studies and this information was not specified in 14 studies. Where the researcher was absent from the observation, this was either because a remote recording device was used, the equipment was set up by caregivers, or because researchers recorded the interaction from an adjacent room.

3.3. Narrative summary

To compare findings, studies were organised into themes, identified according to the study objectives and main activity contexts included. Details of quantitative results and statistics are included in Supplementary Material 3. A table providing further contextual detail about activities included within studies is displayed in Supplementary Material 5.

3.3.1. Play activities

Play was the most frequently studied activity context. Studies that compared play with book reading activities found that play was associated with fewer overall utterances (Jones and Adamson 1987), and shorter utterances (Poulain and Brauer 2018). In contrast, Doering, Schluter, and von Suchodoletz (2020) saw the opposite effect for US mothers, who used more complex utterances during play than book reading. The authors suggest that linguistic outputs may depend on whether parents view play as an educational opportunity, or a chance to passively observe their child. Crain-Thoreson, Dahlin, and Powell (2001) also saw linguistic variation according to how an activity was structured by parents. In their study, children were exposed to more lexically diverse language during book reading, but there was a more even ratio of parent to child utterances in play, suggesting that during this activity parents gave children more opportunities to participate in the conversation. In Kertoy and Vetter's (1995) study, mothers also incorporated children into the conversation more during play than while completing a structured cooking activity. However, Kaye and Charney (1981) found that turn-taking behaviours remained consistent across book reading and play contexts.

Studies also examined noun and verb use in play and reading across multiple languages. Results suggested that the proportion of nouns used by parents is higher during book reading, while verb use is greater during play (Tardif, Gelman, and Xu 1999; Ogura et al. 2006; Altinkamiş, Kern, and Sofu 2014). In contrast Choi (2000)

found that English-speaking mothers emphasised nouns in both book reading and play contexts. Goldfield (1993) studied the influence of different types of play on noun and verb use, and found that while noun types and tokens were more frequent in toy-play, verb types and tokens were more frequent in non-toy-play.

Researchers also considered how the type of toy may influence opportunities for language, finding that toys which promoted engagement in role play activities, such as toy shops or dolls, were associated with more verbal interaction and co-operative communication (Leaper and Gleason 1996) and overall number and length of utterances (O'Brien and Nagle 1987). In contrast, Ryckebusch and Marcos (2004) found that parents used more action requests during structured 'building' play with construction toys than during play with other toys. Studies also considered the representational status of toys or other objects in relation to language. In a study by Gelman, Chesnick, and Waxman (2005), overall amounts of language were higher when talking about objects as compared to pictures, while Jipson, Gülgöz, and Gelman (2016) found that talk about a living creature elicited more gendered pronouns and proper names.

Finally, studies considered how the familiarity of toys may impact the language that parents and children use. Lucariello and Nelson (1986) found that during general play contexts, children used more basic level tokens as compared with novel and unfamiliar contexts. In contrast, in Farrar, Friend, and Forbes' (1993) study, children used more lexical types when playing with toys that represented familiar events, as compared with unfamiliar events. Studies investigating how parents scaffold language when discussing unfamiliar objects found that parents produced new nouns in more salient utterance positions (Cleave and Bird 2006) and were less likely to label objects that were unfamiliar to them or their child (Henderson and Sabbagh 2010).

3.3.2. Book reading

Contexts in which parents read books or tell stories to children were frequently highlighted as opportunities for children to receive rich and complex linguistic input. All-day recordings of parent-child interaction showed that, when compared with naturally occurring non-book reading interactions, book reading utterances had greater lexical diversity and syntactic complexity (Ece Demir-Lira et al. 2019) and involved a higher proportion of adult word counts and conversational turns (Gilkerson, Richards, and Topping 2017).

Results varied according to the method researchers used to structure reading activities, and the language included within their analyses. For example Sorsby and Martlew (1991) found that parents used a greater number of utterances in a structured task than during book reading, however they only counted extra-textual utterances in the book reading task. Using a different approach, Fraser and Roberts's (1975) structured task was compared with a 'story-telling' activity in which mothers were given picture prompts and allowed to construct the narrative themselves; in their study, story-telling was associated with significantly more utterances.

Studies also investigated how diverse forms of book reading or story telling might influence language outputs. Torr and Clugston (1999) found that compared with narrative books, while reading informational books parents used more extra-textual utterances and more questions requiring reasoning language. In contrast, Nyhout and O'Neill (2013) reported more complex language during narrative than didactic books. Variation

has also been found in relation to the overall linguistic complexity of book text. Compared with simple picture books, books with more grammatical complexity within the text and chapter books were associated with less complex language from parents (Noble, Cameron-Faulkner, and Lieven 2018) and children (Leech and Rowe 2014). Noble, Cameron-Faulkner, and Lieven (2018) suggested this may be because parents rely more on the text to deliver the story in more complex narratives. In contrast, Muhinyi et al. (2020) found that books with more complex text facilitated extra-textual talk, abstract language and elaboration by mothers, while Muhinyi and Hesketh (2017) found no significant differences in the amount of maternal talk and MLU when reading low text or high text books. Finally, Riordan et al. (2018) considered the influence of rhyme and found that parental reading styles were different during non-rhyme books, with more language incorporating inferences and predictions.

3.3.3. Naturalistic routines

Several studies found that routine contexts, such as mealtime and bath time, are associated with fewer utterances and less complex language from parents and children than either play or book reading (Rondal 1980; Camaioni and Longobardi 1995; Bornstein, Tamis-LeMonda, and Haynes 1999; Masur and Rodemaker 1999; Tulviste 2003; Flynn and Masur 2007; Hoff 2010). In contrast, others have found that mealtimes favoured more complex language from parents than play, with longer MLU (Lawrence and Shipley 1996), more sophisticated words (Weizman and Snow 2001) and more conversation-eliciting utterances (Hoff-Ginsberg 1991). Lawrence and Shipley (1996) and Tulviste and Raudsepp (1997) both compared use of directive language during mealtimes and structured tasks. Lawrence and Shipley (1996) found that parents used more directives during mealtimes, while Tulviste and Raudsepp's (1997) data showed that more language was used to direct physical activity or attention during the structured task.

Naturalistic recording methods allowed researchers to follow parents and children during their daily routines and document naturally occurring activities. The all-day recordings from Soderstrom and Wittebolle's (2013) study showed that book reading and organised playtime contexts (for example singing or painting activities) were associated with greater quantities of language, although these were also the activities that occurred least frequently. Lower levels of parental talk were found for mealtimes and travel, although child vocalizations were comparatively high during personal care. Soderstrom and Wittebolle (2013) found lower quantities of language when children were outdoors at the park, while Cameron-Faulkner, Melville, and Gattis (2018) showed that children were more talkative and engaged in more connected communication with parents in a natural outdoor environment as compared with an indoor activity. In Tamis-LeMonda et al.'s (2019) study, children were exposed to more words and more tokens per minute during book reading and personal care contexts than play or mealtime.

3.3.4. Media

With children's increasing exposure to electronic devices, studies have begun to investigate the influence of media on children's interactions. Pempek, Kirkorian, and Anderson (2014) and Ewin et al. (2021) found that presence of background television and parents' independent mobile phone use were associated with fewer utterances from parents.

Compared with independent mobile phone use, during joint engagement with devices parents used more utterances, although still fewer overall than during non-digital toy play. (Ewin et al. 2021) Lavigne, Hanson, and Anderson (2015) found that compared with free play, parents' total utterances decreased during joint television viewing, although their use of new words per utterance increased. Stoneman and Brody (1982) considered the influence of the genre of television, and found that mothers talked more and asked more questions about the programme content while watching an educational programme as compared with a sitcom.

Studies also considered the role of media in book reading by comparing digital books with print books. Print books were associated with more language (Worden, Kee, and Ingle 1987), increased dialogic practices (Munzer et al. 2019) and more expansions (Ozturk and Hill 2020), although Lauricella, Barr, and Calvert (2014) found that children verbalised more during electronic book reading.

3.3.5. Methodological implications

A small number of studies aimed to inform methodological approaches for recording parent and child language by considering the effect of changing the observational context. Kwon et al. (2013) found that language used by parents and children was more complex during free play as compared with a structured task, while Bornstein, Painter, and Park (2002) showed that children's utterances increased in frequency and length when in direct interaction with their mothers as compared to free play while close to their mothers. Stevenson et al. (1986) found no significant differences in the amount or complexity of parent and child language when comparing a home and laboratory setting. Data from Tamis-LeMonda et al. (2017) showed that while short, structured tasks were associated with consistently high amounts of complex language from parents, in real-life naturalistic routines language fluctuated across time, interspersed with periods of silence. Finally, studies considered the effect of time spent in a preschool setting on the language that parents and children use. Larson, Barrett, and McConnell (2020) found that adult word counts were slightly higher before taking children to child-care and after picking them up, as compared with days when children were at home all day. Marvin and Privratsky (1999) found no difference in the amount of talk that children used after preschool when they were given after school materials to take home.

4. Discussion

4.1. Summary of evidence

The primary aim of this scoping review was to explore the range of existing literature about variation in linguistic outputs of parents and their preschool children during different activity contexts.

Findings suggested that play activities provide opportunities for co-operative interaction, while book reading is a context in which children are exposed to complex linguistic input. Results for routine activities like mealtime and personal care exhibited large variation, while interaction in infrequently studied activity contexts such as outdoor play merit further study. When remote recording methods were used to document children' daily routines, results confirmed that book reading and organised play contexts

provided rich linguistic input (Soderstrom and Wittebolle 2013). However, these were also the activities that parents and children engaged in together least frequently. It is therefore interesting to consider whether the reliance on these contexts reflects children's real-life experiences.

The predominance of play and book reading contexts may also reflect a cultural bias among researchers. While play is seen as integral to children's development in many Western countries, Roopnarine (2011) reports that in many parts of the world, play is viewed as simply an activity that keeps children occupied. Book reading also reflects a cultural tradition which varies in frequency across cultures, as well as according to levels of parental literacy. Avineri et al. (2015) argue that our understanding of literacy events could be expanded by including a wider range of culturally relevant activities such as playing word games, singing songs or reciting prayers. The meaning that an activity holds may vary across families and their contexts, a finding that was also reflected in the studies presented here. For example, Doering, Schluter, and von Suchodoletz (2020) argued that differences in the language used during play may depend on whether parents view the activity as an educational opportunity. Similarly, Flynn and Masur (2007) state that given the 'goal-directed agenda' of a bath time context, language use depended on whether mothers were more focussed on interaction or on the task of bathing. For this reason, Tamis-LeMonda (2003) argues that studies should incorporate parents' views to better understand variation in how parents structure their child's activities and interactions.

We were also interested in understanding the range and diversity of participants that have been included in studies. Although our inclusion criteria focussed on parents and carers, 90% of participants were mothers. This is reflective of a general trend in parenting research that has largely focussed on maternal influences on development and neglected to include fathers or indeed any other type of carer (Cabrera, Volling, and Barr 2018). In addition, results from this review primarily represented participants who were of Caucasian or European American ethnicity and middle-class, in line with the participant sampling bias reported in developmental research (Nielsen et al. 2017). The prevalence of English-speaking participants from the USA is in line with reports that PCI interventions for speech and language are based on evidence about typical speech and language development in English, gathered from participants within the 'dominant' US culture (Leadbeater and Litosseliti 2014).

Finally, we considered how the range of methodological approaches used may affect study findings. Although most studies took place in children's homes, the majority of articles used a structured, researcher-directed design. Studies recognised potential limitations to ecological validity as a result of this methodological approach, given that interactions are recorded for a limited time only (Kwon et al. 2013) and the situational context was prompted by researchers (Doering, Schluter, and von Suchodoletz 2020). In addition, when studies compared naturalistic and structured interactions, they found that structured tasks typically led to more complex and dense language from parents, while quantity of language was more dispersed during naturalistic routines (Tamis-LeMonda et al. 2017). The predominant method for data collection was video recording. Some studies described how researchers attempted to be as 'unobtrusive' (Flynn and Masur 2007) or 'discreet' (Rondal 1980) as possible, while another study claimed that subjects 'seemed unaffected' by the presence of recording equipment (Worden, Kee,

and Ingle 1987). In contrast, some did acknowledge how recording equipment (Ozturk and Hill 2020) and the presence of the researcher (Tamis-LeMonda et al. 2017) might have influenced the way that parents and children interacted in their data.

4.2. Future directions

By considering how parent–child language varies across activity contexts, this scoping review aimed to inform researchers’ methodological choices and also consider the evidence base that informs early interventions for speech and language.

Given that ecological validity is limited when observations take place in laboratories (Wang et al. 2020) or with a researcher present (Dudley-Marling and Lucas 2009), the use of non-obtrusive observation to record naturalistic language is important. Despite increasing prevalence of naturalistic recording methods, many studies did not meet the inclusion criteria for this scoping review (for example Bergelson et al. 2019) due to a lack of detail about individual activity contexts that took place during the recording. It is therefore important that future studies consider ways to combine the detailed activity context data of structured tasks with naturalistic language recordings. The scoping review also found that there was a lack of diversity in participant groups that have been studied, therefore it is pertinent that researchers reflect on potential biases in study design and make efforts to recruit beyond traditional participant groups.

With regard to practitioners working in early years education and speech and language therapy, parent–child interaction is a frequent focus for intervention. Yet as Gallimore, Goldenberg, and Weisner (1993) note, interactions do not occur in a vacuum but are embedded within the activity contexts in which children spend their daily lives. To provide effective intervention, it is important that practitioners consider how activities might be structured to best fit each family’s individual circumstances.

4.3. Limitations

A possible limitation of our scoping review is publication bias, as we only included peer-reviewed journal articles. In addition, our review was limited to studies written in English and with monolingual participants. Therefore findings may have been skewed towards research based in English-speaking countries and with participants who represented limited cultural and linguistic diversity.

4.4. Conclusion

This scoping review demonstrated that much of the current evidence on parent–child interaction across activity contexts is based on structured, researcher-directed tasks, most frequently centred around play and book reading. It is important to consider how research might better reflect the diversity present in our communities, both in terms of participants and children’s real everyday routines. A more culturally competent approach to research and intervention might involve consultation with individual families to consider how different daily activities present naturally occurring communication opportunities.

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Data availability statement

This scoping review has been registered on Figshare at the following link: https://figshare.com/projects/The_Effect_of_Activity_Context_on_the_Language_used_by_Parents_and_Children_A_Scoping_Review_Protocol/99182

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