

Effects of story complexity on mothers' abstract language use during shared reading

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Introduction

Shared reading is beneficial for preschool aged children's language development, especially when caregivers discuss the book (Zucker et al., 2010). Other research shows that preschool aged children's exposure to abstract language, such as explanations and predictions, predicts their language development (Dickinson & Porche, 2011; Rowe, 2012). However, little is known about the role of book, caregiver, and child factors in caregivers' abstract language use during shared reading. We hypothesized that story complexity, maternal socioeconomic status (SES), child engagement, child language abilities, and child age would predict mothers' abstract language use.



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Method

Participants

- 55 mother-child dyads (3;00–4;11 years) of diverse SES

Procedure

- Repeated-measures, counterbalanced design
- Dyads videoed sharing a simple story and a complex story
- Story complexity operationalized by inferential demand

Measures

- Child language: British Picture Vocabulary Scale (Dunn et al., 1997)
- SES: Indices of Multiple Deprivation
- Child engagement: Children's Orientation to Book reading scale (Kaderavek et al., 2014)

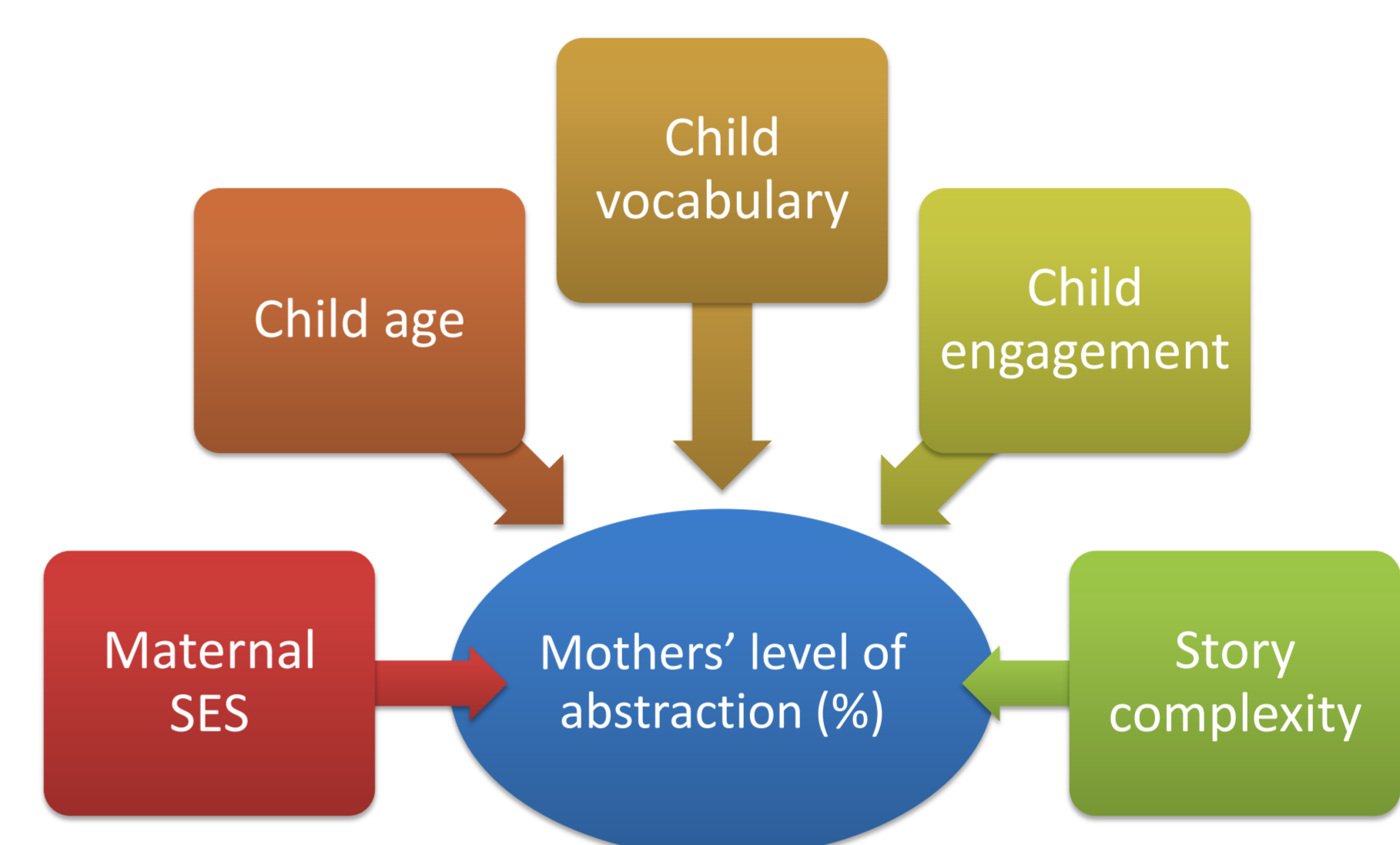


Fig. 2. Linear mixed effects models (LMEs) were used to tease apart effects of story complexity, SES, child age, vocabulary, and engagement on mothers' abstract language use (with random effects for individual dyad)

Transcription and coding

- Videos transcribed in CHAT format (MacWhinney, 2012)
 - Maternal utterances reliably coded as:
 - o Transactional (e.g., attention directing)
 - o Level 1: labelling & descriptions
 - o Level 2: inferences, bridging to real life & evaluations
 - o Level 3: explanations & predictions
- (Level of abstraction = % Level 2 + % Level 3 utterances)

Fig. 2 (above) shows the statistical analytic plan

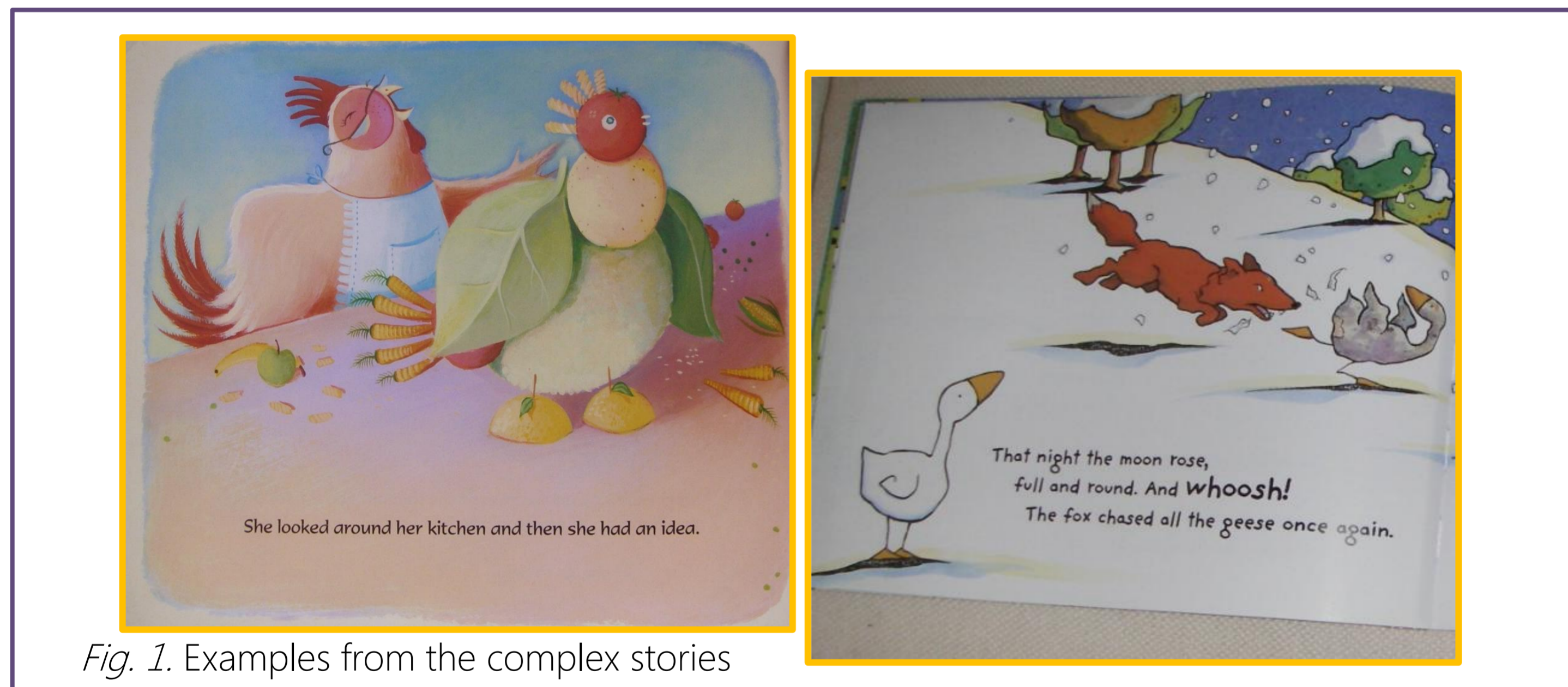


Fig. 1. Examples from the complex stories

Results

- Mothers produced significantly more utterances in the complex vs. simple story condition ($M = 32.81$, $SD = 25.70$, and $M = 25.28$, $SD = 22.75$, respectively, $Z = -4.817$, $p < .001$)
- Complex stories facilitated a higher level of abstraction (7% greater), which was driven by Level 3 utterances: on average, 0% vs. 13% in the simple vs. complex story condition, respectively
- Child engagement predicted Level 2 utterances: on average, 9% more when child was highly vs. moderately engaged
- SES, child language abilities, and child age did not predict mothers' language use (level of abstraction, %Level 2, or %Level 3 utterances)

Conclusions

- 1) Complex stories might be particularly useful for children's language development though increased exposure to abstract language
- 2) Shared-reading interventions that encourage caregivers' use of abstract language should use complex rather than simple stories
- 3) Theories of language development should consider the role for specific aspects of given contexts (e.g., story complexity) and dynamic contextual factors such as child engagement

Selected references

- Dickinson, D. K., & Porche, M. V. (2011). Relation between language experiences in preschool classrooms and children's kindergarten and fourth-grade language and reading abilities. *Child Development*, *82*(3), 870–886.
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- Zucker, T. A., Cabell, S. Q., Justice, L. M., Pentimonti, J. M., & Kaderavek, J. N. (2013). The role of frequent, interactive prekindergarten shared reading in the longitudinal development of language and literacy skills. *Developmental Psychology*, *49*(8), 1425–1439.

Acknowledgements

This research was funded by the Economic and Social Research Council (grant number ES/J500094/1). Special thanks to the participating families.

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