Background

Why Repetition?
- Parental repetition in communication with children is thought to facilitate child language development.
- Specifically, repetition of a child's utterance ratifies a child's attempt at language and provides instantaneous feedback.
- This has been proposed to increase attention and heighten social arousal thereby strengthening a child's motivation to engage in communication.
- Research suggests that children experience feelings of social reward when they hear their own words repeated by others and this promotes language development (Che et al., 2018).

Why Fathers?
- Studies show that fathers contribute uniquely to their children's language development (Pancsofar & Vernon-Fegans, 2010).
- Furthermore, in line with the fine-tuning hypothesis and transactional models, Schwab and colleagues (2018) found that fathers are sensitive to their children's vocabulary knowledge and adjust their repetition accordingly.
- Despite such findings, fathers remain largely underrepresented in research on child development.

Aims and Hypotheses

2.1. The Present Study:
- The present study investigated whether fathers' repetition of their children's utterances would be associated with child language development.

2.2. Hypothesis 1:
- In accordance with the fine-tuning hypothesis, it was predicted that fathers' repetition would be negatively associated with children's concurrent language abilities such that fathers of children with lower language abilities at the age of 2 would repeat more.

2.3. Hypothesis 2:
- This study also predicted that, controlling for children's concurrent language abilities, fathers' use of repetition with their 2-year-olds would be positively associated with child language ability at age 4.

Methodology

3.1. Participants
- 21 two-parent families and their children (10 male, 11 female) participated in the study when children were 2- and subsequently 4-years-old.

3.2. Procedure
- Upon arrival at the lab, children were developmentally assessed at both ages by a trained research assistant.
- Subsequently, father–mother–child triads were video recorded while they participated in 10-minute structured play sessions whereby they were instructed to play with their child as they normally would.
- Recordings were transcribed using the CHAT conventions of CHILDES (MacWhinney, 2000) and subsequently analysed using the automated CLAN program.

3.3. Measures

3.3.1 Standardised Measures of Language
- At age 2, child language ability was measured using the Bayley Scales of Infant Development (Bayley, 2006).
- At age 4, child language ability was measured using the Wechsler Preschool and Primary Scale of Intelligence (Wechsler, 2012).

3.3.2 Language-in-Interaction

Child Language-in-Interaction
- CLAN was used to compute three measures of child language-in-interaction:
  1. Language quantity (number of words)
  2. Language quality (TTR/VOCD*)
  3. Language complexity (MLU)(

Father Language-in-Interaction
- CLAN was used to compute two general measures of fathers' repetition:
  1. Overlap
  2. Limitations – further trifurcated into:
    a) Exact imitations
    b) Reduced imitations
    c) Expanded imitations

* TTR/VOCD = measures of vocabulary diversity

Results

4.1. Hypothesis 1:
- Bivariate correlational analyses revealed significant negative correlations between:
  1. Fathers' use of overlap and child language quality ($r = -0.44$, $p < 0.05$)
  2. Fathers' use of reduced imitations and child language quality ($r = -0.49$, $p < 0.05$)
- Independent samples t-tests revealed that fathers of children with lower language quality engaged in significantly more overlap ($t(19) = 2.6$, $p < 0.05$) and significantly more reduced imitations ($t(19) = 2.6$, $p < 0.05$).

4.2. Hypothesis 2:
- Partial correlations between fathers' repetition at age 2 and child language ability at age 4 revealed that, controlling for children's language ability at age 2, fathers' overlap was significantly positively correlated with child language quality at age 4.

Discussion

5.1. Hypothesis 1:
- In line with previous research and the fine-tuning hypothesis, it was found that fathers of children with lower vocabularies (indexed by language quality) engaged in more repetition.
- It is therefore plausible that fathers display sensitivity and adapt their speech according to their child's language abilities, specifically to their children's language quality.

5.2. Hypothesis 2:
- Furthermore, fathers' repetition to their 2-year-olds was positively correlated with children's language quality at 4-years-old.
- These findings suggest that fathers' repetition may be contributing specifically to children's vocabulary development – that is, language quality rather than language quantity or complexity.

5.3. Conclusion
- The present study contributes to the expanding field of research on fathers, and suggests that there may be synergies between fathers' repetition and child language quality.
- Importantly, fathers' use of repetition appears to be a facilitative strategy for vocabulary development longitudinally.

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