Anticipating informativity in child-directed vs. adult-directed utterances

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BACKGROUND

How do we generate guesses about upcoming content?

Production/comprehension asymmetry
Comprehenders rely on real world knowledge – biased towards typicality:
- the man will ride the *motorbike* > the man will ride the *carousel*[1]

... but speakers tend to omit typical content and include informative content:
- *brown* banana > *yellow* banana[2]

Expectations for informativity in comprehension
- comprehenders are aware of this preference for informativity in speakers[3,4]
- expect more informative contributions the more the speaker is emphasised[5]

The ability to reason about speakers' informativity goals guides comprehenders' expectations for upcoming content.

Informativity expectations are malleable
- comprehenders adapt based on speaker properties; expect more informative contributions from a highly informative speaker[5]

How fine-tuned are these expectations?
- what other aspects of the context do comprehenders take into account when guessing what someone will say next?
- do they also reason about who the addressee of an utterance is?

RESEARCH QUESTION

Are comprehenders' expectations for informativity modulated by whether the speaker is talking to a child or an adult?

Since children are still learning about the world, they may hear more about what is typical, especially young children[6]. That is, their input may be characterised by (to an adult) less informative content. If so, comprehenders are predicted to expect less informativity when a speaker is addressing a child.

METHODS

Main task (N=100): Within-participant manipulation (child vs. adult addressee) to index comprehenders' expectations about content of conversation-initial utterances

**Typicality pre-test** (N=22): Elicitation of typical things one finds at 20 test-item locations

5 measures to capture **different senses of informativity**:
- typicality of main nouns (compared to pre-test)
- use of modification
- use of negation/marking absence
- entropy (variability)
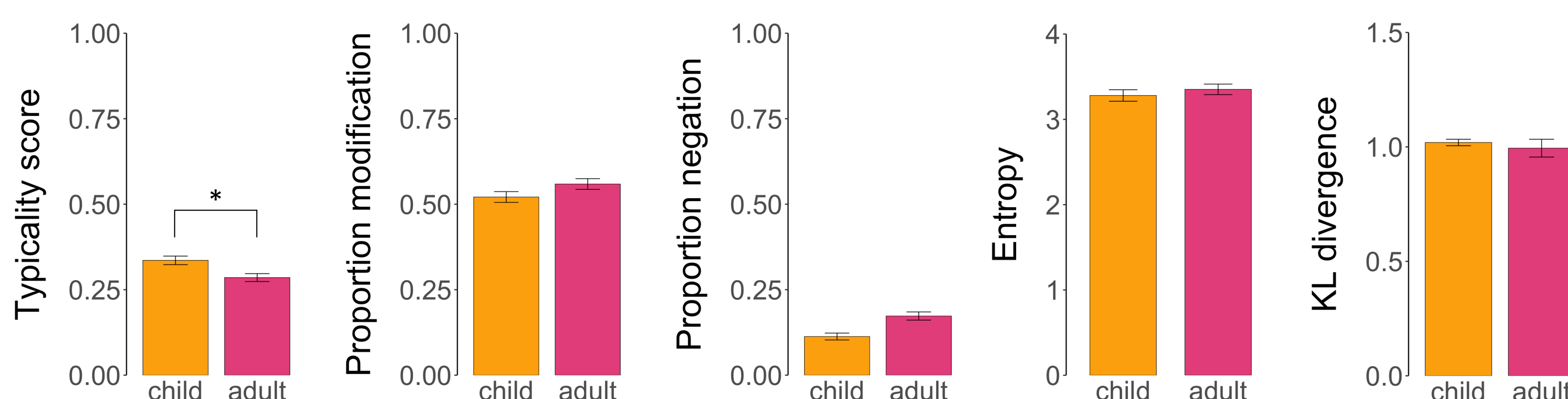- KL divergence (compared to a baseline condition: At the [location], there's_____)

SAMPLE RESPONSES

"I'm at the beach, and there's _____"
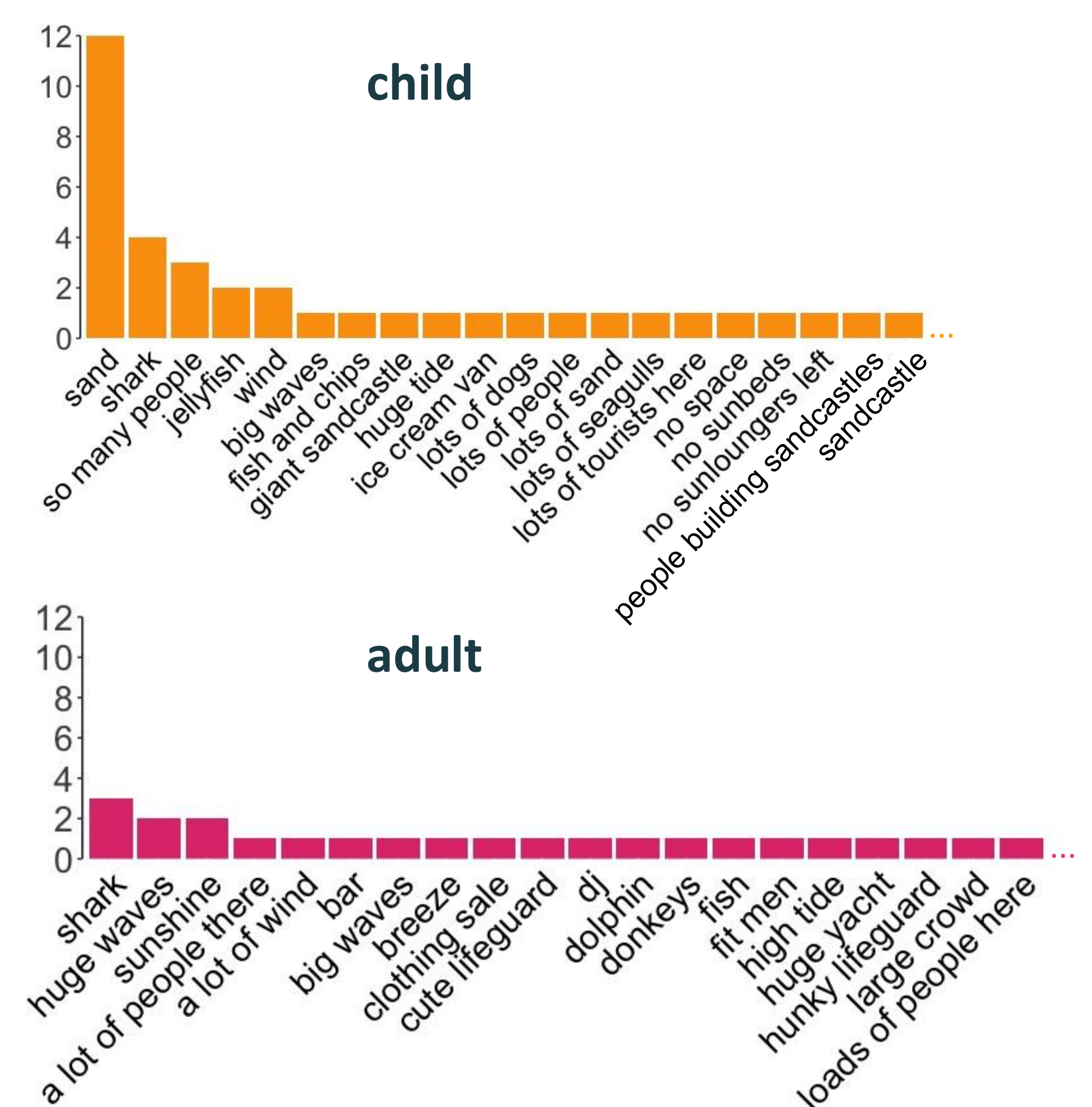
RESULTS

- **Typicality of main nouns:** Significant increase in child-directed utterances
- **Modification:** Marginal increase in adult-directed utterances
- No other significant differences

TAKEAWAY

If typicality is a reliable measure of informativity, we see evidence of adjustment to the addressee.

Selected references

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