Passive sentence constructions are known by everyone (even four-year olds)

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Developmental Trajectory

Children's comprehension of passive sentences (2) appears to be delayed when compared to active sentences (1). (Hirsch & Wexler 2006)

(1) The dog chased the cat. 🙂

(2) The cat was chased by the dog.

   < 4 years: 🙁   4-5 years: 🙂

Comprehension of non-actional passive sentences (3) appears to be further delayed. (Marastos et al. 1985)

(3) The cat was loved by the dog.

   < 5 years: 🙁   5-6 years: 🙂

Some researchers have hypothesized a lack of syntactic knowledge as the explanation for this apparent delay. (Borer & Wexler 1987, Fox & Grodzinsky 1998, others)

Is there another explanation for these results?

Alternate Explanation: Pragmatics of the Passive

Referential passive sentences sound strange without the proper context.

(4) Lamb was forgotten by **Horse**. 😐

Adults can easily imagine this context with multiple potential forgetters. However, children may have difficulty imagining such a context.

The use of a **quantifier** obviates the need to imagine such a context because it requires that there are multiple potential forgetters.

(5) Lamb was forgotten by **everyone**. 🙂

The Question

Did children perform poorly on passive sentences in previous studies due to lack of syntactic knowledge or a difficulty with imagining the proper context for the passive?

Method

- Participants: 12 adults, 34 children (age range: 4;0,19-5;0,0, mean: 4;6,1)
- Verbs: know, love, like, miss, spot, see, forget, hear
- Between subject: referential vs. quantified

The same set of stories was read to each child. In each story there were multiple forgetters, so proper context was provided for use of the passive.

"…Lamb saw her old friends! She walked up to them, but everyone was wondering who it was…

…Horse had the best memory, and even he couldn't remember Lamb! None of them remembered their old friend!"

"Snuggles, can you find someone who forgot Lamb?"

Referential Active "Horse forgot Lamb."

Quantified Active "Everyone forgot Lamb."

Referential Passive "Lamb was forgotten by Horse."

Quantified Passive "Lamb was forgotten by everyone."

"Did Snuggles get it right or did he get it wrong?"

Predicted Results

The **lack of syntactic knowledge hypothesis** predicts that children's accuracy with passive sentences will be *at chance*.

The **pragmatic hypothesis** predicts that children's accuracy with passive sentences will be *above chance*.

Results

Children in this study performed above chance in both the referential and quantificational trials.

Referential adults: $n = 6$ children: $n = 18$

Quantificational adults: $n = 6$ children: $n = 16$
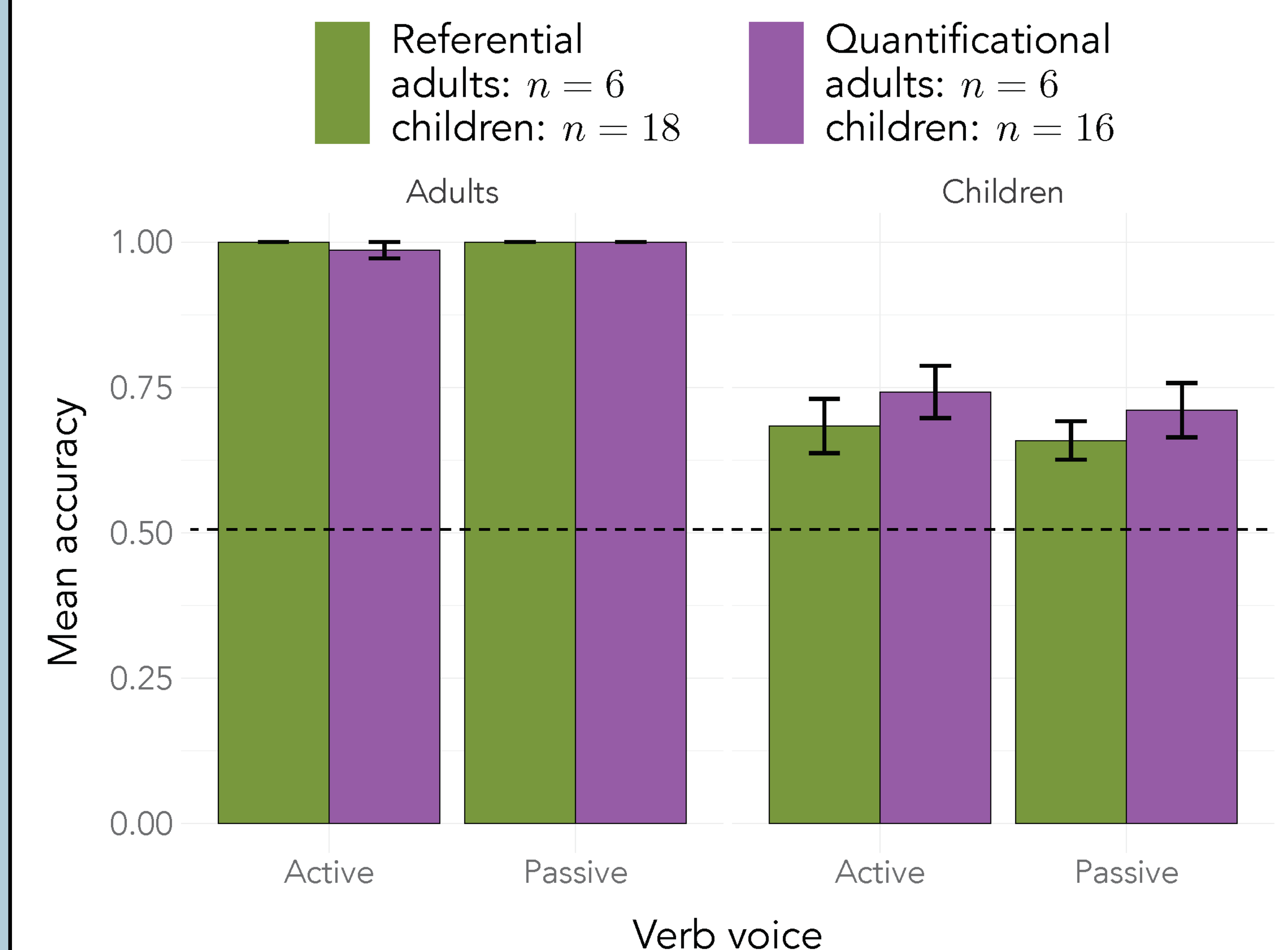
The Answer

This study suggests that previous results were driven by use of passives without proper context, and that children *do* have syntactic knowledge of the passive.

References

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