

When Do Children Understand Sentential Negation in Spanish?

Children use negation very early and very frequently during the first stages of language acquisition, but adult-like understanding of negated sentences is argued to be acquired much later [1]. Most research has focused on English, with some studies reporting mastery of negated sentences in 3-year-olds [2], and others reporting persistent difficulties in children aged 4 and older [3]. Similarly, adult-like comprehension of negation in German emerges at age 6 [4]. Unlike Germanic languages such as German, Spanish realizes negation preverbally, which could make it easier for children to recognize the negation marker and contribute to different acquisition patterns. Spanish-speaking children begin producing sentential negation at around 1;9 and produce adult-like sentential negation already by age 2 [5], earlier than in German [6]. However, little is known about how Spanish-speaking children understand negated sentences because no study to date has examined this topic specifically.

We addressed this question by examining the understanding of sentential negation in 107 monolingual Spanish-speaking children between the ages of 3 and 6. In a two-alternative forced-choice task, children were asked to choose the correct one of two pictures as quickly as possible after listening to short stories in which a character faced a choice between two actions (e.g., *Dad asks Ben to look after his little sister Maria. Ben is supposed to build a tower for her, but maybe he'd rather draw a unicorn for Maria. Let's see!*). Each story ended with an affirmative or negative target sentence revealing the character's choice, e.g., “[*Pues/No*] construye la torre.” (*So, he builds the tower. / He doesn't build the tower.*). Every story introduced alternative actions ensuring that both affirmative and negative target sentences were equally informative. This is important because previous research has argued that, without proper context, negated sentences are less informative than affirmative sentences [7]. Spanish adults were also tested using the same design and performed at ceiling [8].

Focusing on children's error rates in affirmative vs. negated trials, descriptive analyses show that children's overall performance was higher in the affirmative than in the negative condition (Figure 1). Analysis by age group indicates that comprehension of negated sentences develops gradually, and that up to age 6, affirmative sentences were understood better than negated ones. Using 90% correctness as the threshold for adult-like performance, only the six-year-olds demonstrated an adult-like understanding of sentential negation (Figure 2). Three-year-olds' performance was at chance for negated sentences. Overall, these findings provide novel evidence that adult-like comprehension of negation is not mastered until the age of 6. This is in line with findings from German and English, suggesting that a linearly early position of the sentential negation marker may not speed up comprehension of negated sentences. A follow-up study using the same design will test this assumption with German-speaking children.

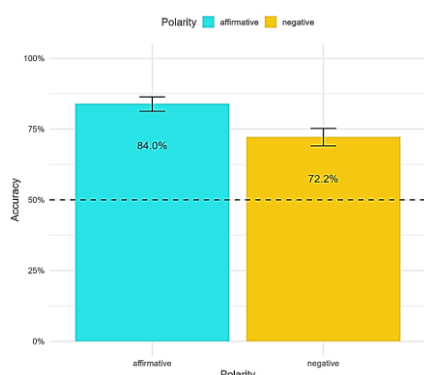


Figure 1. Accuracy by polarity across age

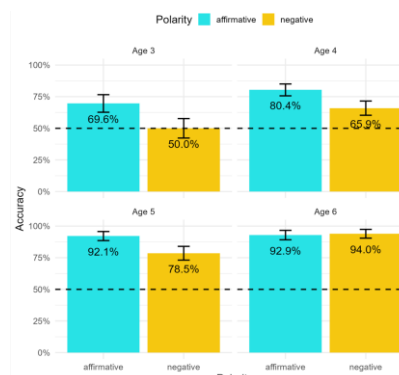


Figure 2. Accuracy by polarity and age group

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