

Use of Definite and Indefinite Articles by Monolingual and Bilingual Preschoolers

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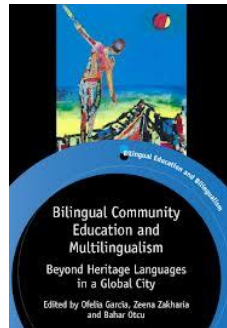
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Significance: 45% of preschoolers in NYC exposed to
a Language Other Than English at home

1. Spanish
2. Chinese
3. **Russian**
4. Haitian (Creole)
5. Italian
6. French
7. Yiddish
8. Korean
9. African Languages
10. Polish
11. Tagalog
12. Greek
13. Arabic



14. **Hebrew**
15. (Bengali)
16. Urdu
17. Hindi
18. German
19. Japanese
20. Serbo-croatian
21. Portuguese
22. Persian
23. Vietnamese
24. Hungarian
25. Gujarati

Languages Other Than English (LOTE) spoken by New Yorkers over 5 years of age, US Census Bureau (2009) American Community Survey Table B160001 in Garcia, Zakharia & Otcu, 2013, p13.

Use of Definite Versus Indefinite articles in English

I want **an** orange.

vs.

I want **the** orange.

→ Different meanings, re: definiteness and specificity

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Acquisition of Articles in Children

- Van Hout et al., (2010)

Monolingual children tend to overuse definite articles.

- Zdorenko & Paradis (2008)

The influence of the first language is limited to the very early stages of article acquisition.

- Kedar (2019)

Longitudinal study on a Hebrew-English child. Indefinite articles appear before definite articles.

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Research Questions

1. Is there a consistent pattern of article use in bilingual and monolingual children?
2. Is there a consistent pattern on article use in Hebrew-English and Russian-English children?
3. Is there a link between article use and working memory?

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Expression of definiteness and indefiniteness across languages

Different devices across languages to express definiteness and indefiniteness.

- Demonstratives, possessive adjectives
→ Russian
- Articles
→ English and Hebrew

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Definiteness and Indefiniteness in English, Hebrew, and Russian

	English	Hebrew	Russian
Indefinite Article	A / An	-	-
Definite Article	The	Ha ה	-

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Hypotheses

Based on previous research, we expect to find:

- A. An overuse of definite article in monolingual and bilingual children.
- B. A higher rate of accurate article use in monolingual children.
- C. Different patterns of article use amongst Hebrew and Russian speaking children (in early stages of acquisition).
- D. A stronger working memory in bilingual children and a correlation between working memory and accurate use of article.

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Methodology

Participants

- 9 Monolinguals; 3.2 – 4.5 years old
- 9 Bilingual Hebrew-English; 3.5 – 4.5 years old
- 4 Bilingual Russian-English; 4.5 – 4.11 years old

→ preliminary

Tasks

- 2 Constrained Elicitation tasks
- Narratives
- Working memory task

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Truth Value (TV) Adapted from Van Hout (2010)



This is Mark. Mark saw a bouquet of balloons and he wanted one, he loves balloons! What did Mark take?

Truth Value (TV)

Adapted from Van Hout (2010)



This is Mark. Mark saw a bouquet of balloons and he wanted one, he loves balloons! What did Mark take?

Target: **A** balloon

Task 1: Truth Value (TV)

Adapted from Van Hout (2010)



This is Sally. Sally wants to play outside but it is cold. She found a coat, a backpack, and a swimsuit in the closet. Which of these should Sally put on to keep herself warm?

Task 1: Truth Value (TV) Adapted from Van Hout (2010)



This is Sally. Sally wants to play outside but it is cold. She found a coat, a backpack, and a swimsuit in the closet. Which of these should Sally put on to keep herself warm?



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Target: **THE** coat

Task 2: Elicitation Paragraphs (EP) Adapted from Van Hout (2010)

Anne is having a birthday party. She is turning six-years-old today! Anne asked her mom to bake a very special cake for her party. What did Anne ask her mom to bake?

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Task 2: Elicitation Paragraphs (EP) Adapted from Van Hout, 2010)

Anne is having a birthday party. She is turning six-years-old today! Anne asked her mom to bake a very special cake for her party. What did Anne ask her mom to bake?

Target: **A** (special/ birthday) cake

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Task 2: Elicitation Paragraphs (EP) Adapted from Van Hout (2010)

She wanted a birthday cake with three layers: one pink layer, one green layer, and one yellow layer. Anne's mom went to the kitchen and she baked it exactly like Anne had asked! When she was finished, she placed it on the table for the birthday party. What did Anne's mom put on the table?

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Task 2: Elicitation Paragraphs (EP) Adapted from Van Hout (2010)

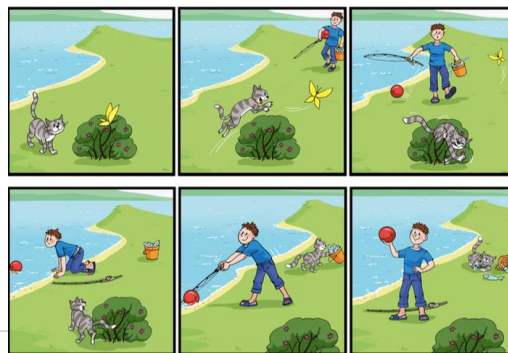
She wanted a birthday cake with three layers: one pink layer , one green layer, and one yellow layer. Anne's mother went to the kitchen and she baked it exactly like Anne had asked! When she was finished, she placed it on the table for the birthday party. What did Anne's mom put on the table?

Target: **THE** (birthday) cake

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Task 3: Narratives Adapted from Gagarina et al. (2016)

- 4 story boards.
- 6 pictures in sequential order.
- Child narrates the story with minimal prompts.



Task 4: Working Memory Task (WM) Gathercole et al. (1994)

Participants listened to 40 pre-recorded nonsensical words.

- 10 2-syllable words
- 9 3-syllable words
- 11 4-syllable words
- 10 5-syllable words

Ballop

Doppelate

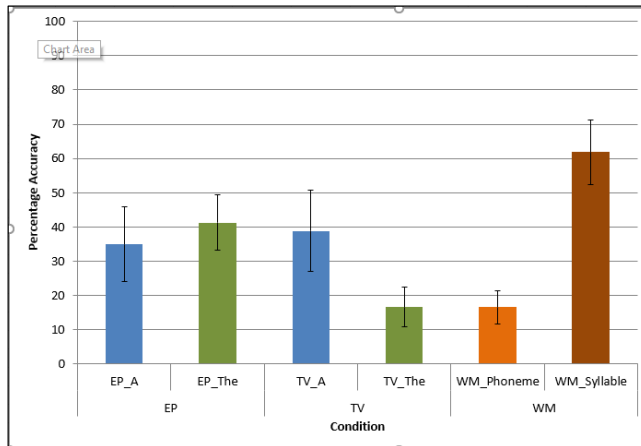
Woogalamic

Reutterpation

Coded for (a) accurate phonemic repetition and (b) accurate syllable structure repetition.

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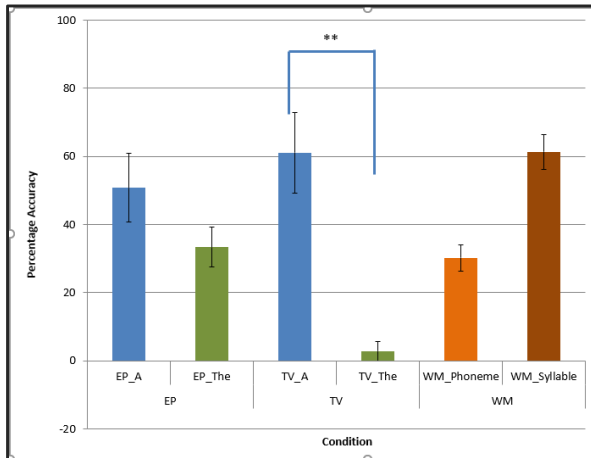
Results Accuracy Monolinguals All Tasks



- Most errors: omissions
- TV: More inaccurate production of A > THE
- EP: More inaccurate production of THE > A
- WM: More accurate with syllable repetition > phonemic repetition.

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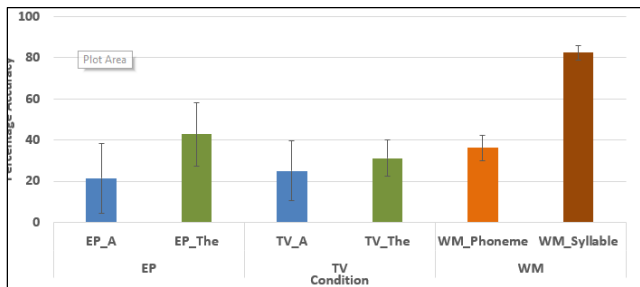
Results Accuracy Hebrew-English Bilinguals All Tasks



- TV: Most errors on THE are replacements with A (almost all)
- A is used as the default.
- Correlation between WM/Syllables and A Accuracy (EP and TV combined): trend towards significance

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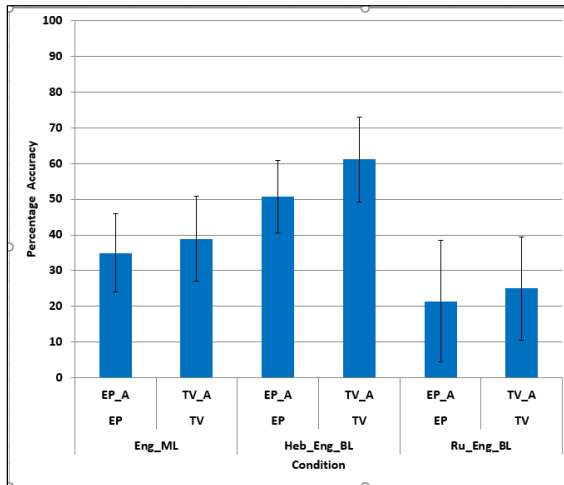
Results Accuracy Russian-English Bilinguals All Tasks



- Participant pool was too small to run within group statistical analyses.

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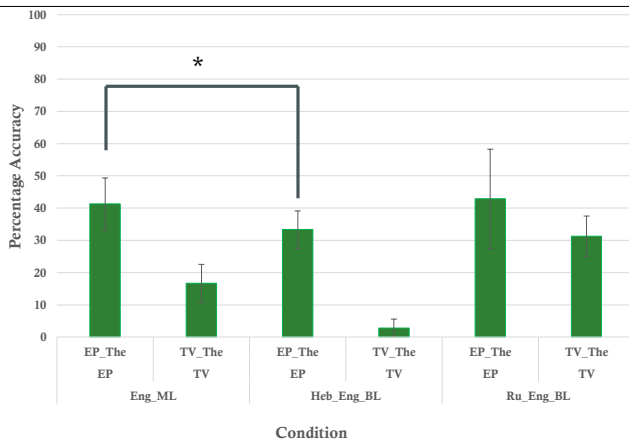
Comparison Accuracy A all groups



- There is no significance in the accurate use of A across all groups.

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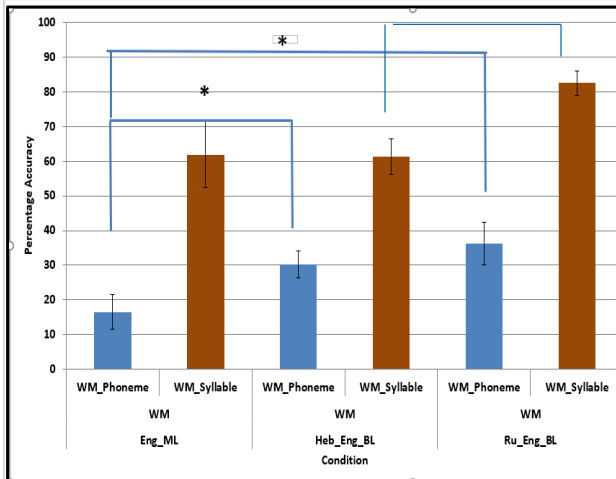
Comparison Accuracy THE all groups

TV:

- Monolinguals are significantly more accurate in THE than Hebrew-English speaking kids.
- Russian-English bilinguals: difference with Hebrew-English-trend, not significant

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Comparison Working Memory Accuracy across all groups



- No significant difference across groups on Accuracy measured by number of syllables
- Significant difference between Monolinguals and Bilinguals
→ Bilingual advantage
- There does not seem to be a clear relation between accuracy of articles and WM.

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Conclusions

A. ~~X~~ Overuse of *definite* article in monolingual and bilingual children.

→ Overuse of indefinite A in Hebrew Bilinguals

B. ~Higher rate of accurate article use in monolingual children.

Monolinguals more accurate on THE in TV task

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Conclusions

- C. Different patterns of article use amongst Monolingual Hebrew and Russian speaking children.
- Monolingual: Omissions for A and THE
 - Hebrew: Substitutions (A replacing THE)
 - Russian: Omissions for A and THE
 - ✧ Suggestive of L1 influence.
- D. A stronger working memory in bilingual children.
- Very limited impact of article use.
 - Suggests that L1 influence is more important than WM.

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