

LOL Lab

Language Of Learning Lab
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The Theme of Self Integrated in Children's Books Across Time

Background

The purpose of children's books have shifted over time

Early Books = learning about religion

Later Books = experience fantasy/adventure to promote creativity

Prior research examined lexical diversity in children's books vs. child-directed speech (Montag et al., 2019)

Link established between complex lexical styles and reading comprehension in later childhood

Current Study

Examined use of lexical diversity & self-referential words over time

Methods

Materials

100 Children's Picture Book Corpus
(Montag et al., 2019)



Natural language processing (NLP) was used to analyze all corpus texts along:

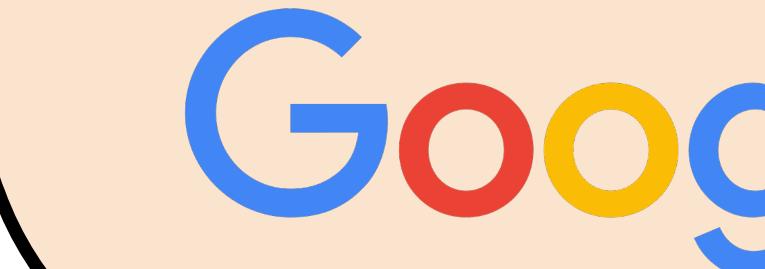
- self-reference word proportions
- linguistic complexity



Procedure

Corresponded with Montag via email to gain access to corpus

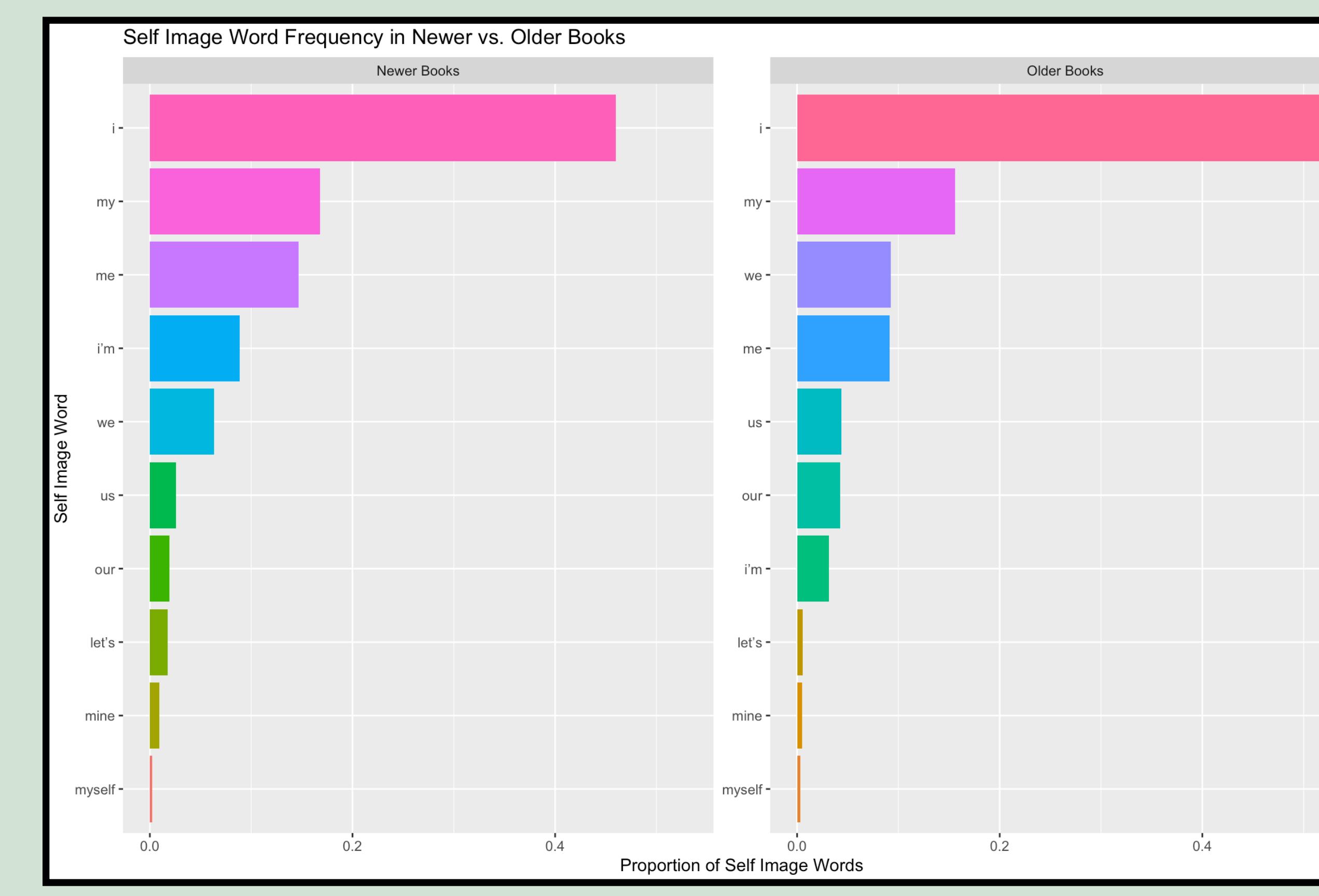
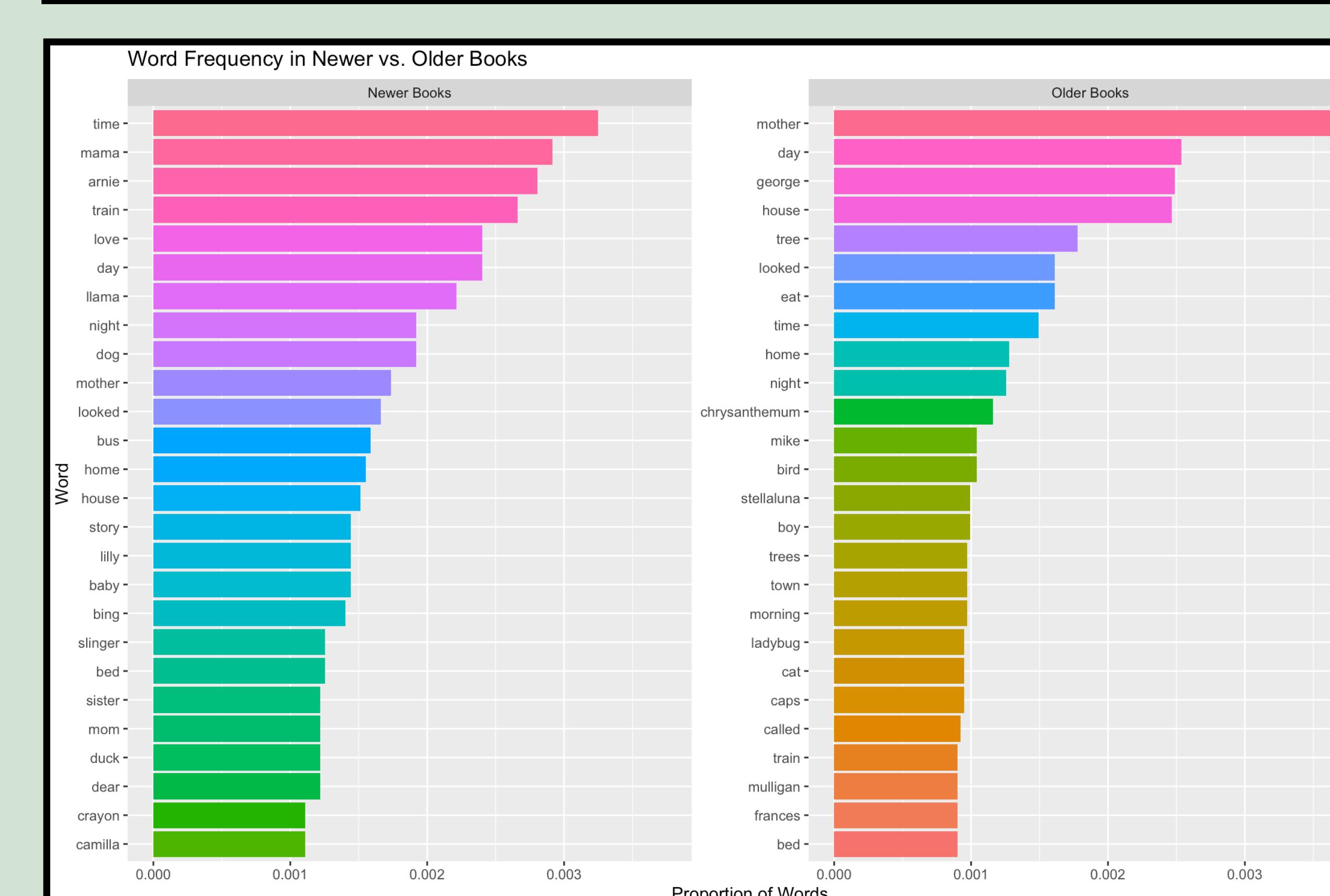
Google search to find year books were published in



No significant correlations found between year published and self-reference words

Linguistic indices were strongly correlated to publishing year

	Proportion of Self-Reference Words				Average Lexical Indices			
	% Self Words	% Our Words	% Unique Self Words	% Unique Our Words	Word Count	# Words per Sentence	Content Tokens	Lexical Density Tokens
Year Published	0.09	-0.02	0.09	0.09	-0.32	-0.27	-0.26	0.28



Results

Discussion

Across our publishing dates (range = 1902-2014):

Significant correlations found between linguistic indices but NOT self-reference words

Strong negative correlations among: word count, number of words per sentence, & content words

Strong positive correlation with lexical density

Indicates that while linguistic style/structure may change over time, content-related indices (i.e., self-reference words) stay relatively stable

Limitations:

limited corpus size

publishing range only spans approx. 1 century

Future Directions

Future studies should:

Investigate additional referential words (1st vs. 2nd vs. 3rd person pronouns)

Assess how linguistic indices affect perception of stories (e.g., imageability, perspective-taking)

Examine other linguistic indices of picture books across time (e.g., cohesion, sentiment)

References

- Montag, J. L. (2019). Differences in sentence complexity in the text of children's picture books and child-directed speech. *First Language*, 39(5), 527-546.
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- Pinkerton, B. (2016, May 10). Through The Looking Glass: How Children's Books Have Grown Up. *NPR*.