

INTRODUCTION

Importance of Maternal Speech

- Opportunity for child spontaneous learning¹
- Mothers provide simple descriptions in infant's first year of life, then switch to using more complex words and labels as the child ages²
- Maternal responsiveness can predict child vocabulary better than maternal vocabulary itself³

Maternal speech varies cross-culturally

- African American children have more vigorous narrative quality, production, and comprehension abilities⁴
- Research shows that children of African American, African, or Hispanic mothers had stronger narrative quality than children of White mothers⁵

RESEARCH QUESTIONS

1. Do Black and White mothers differ in the total and discrete words used in a picture book task?
2. Do Black and White mothers differ in parts of speech used in a picture book task?
3. Can maternal speech in a picture book task predict infant's vocabulary?

PARTICIPANTS

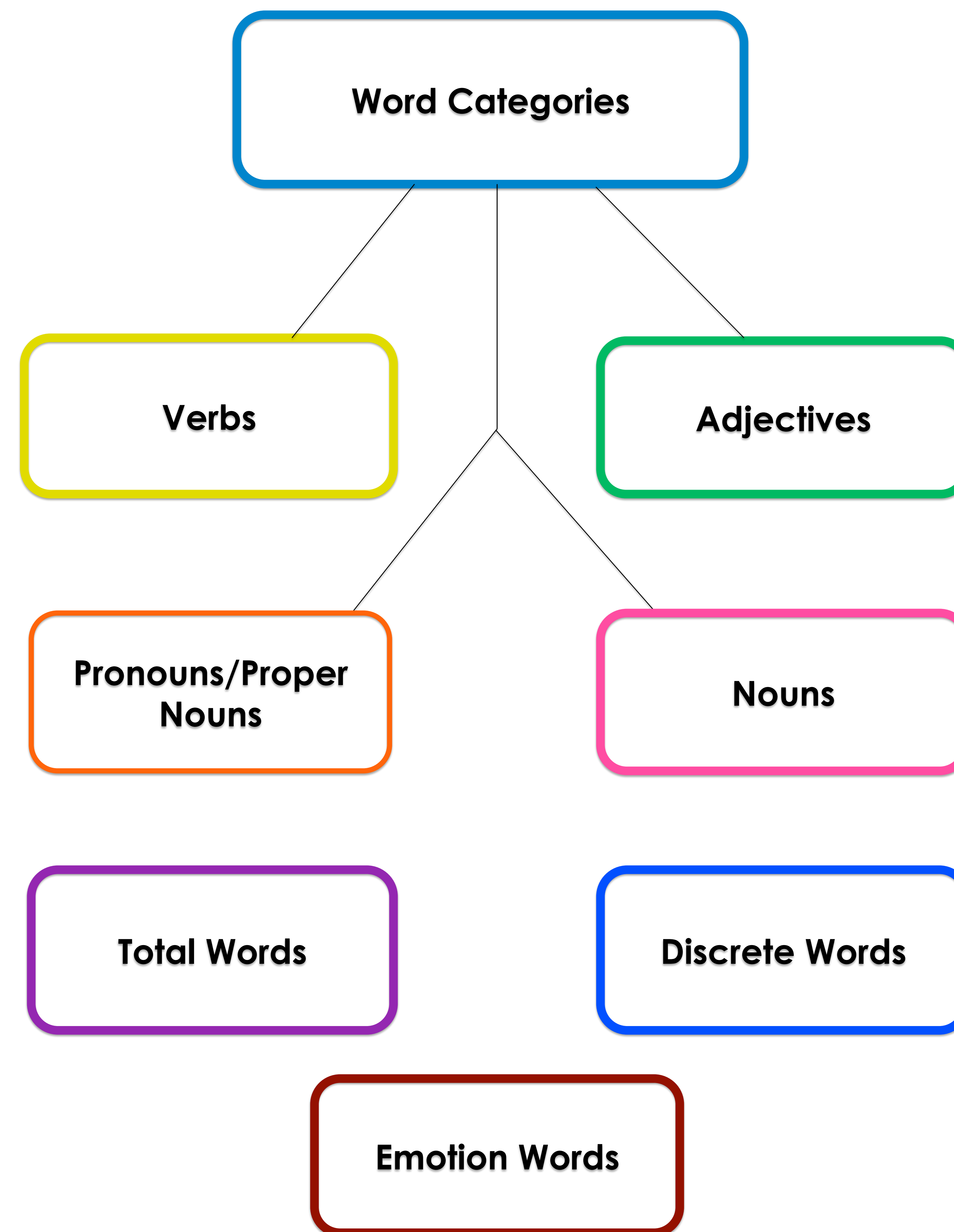
- **Mother-Infant dyads (N=50)**
 - Black mothers (N=26), White mothers (N=24)
- Infants between 10-22 months of age
- Black mothers: 44% earn \$60,000+, 69.3% 4-year degree
- White mothers: 79.2% earn \$60,000+, 87.5% 4-year degree
- Comparable education distribution

METHODS

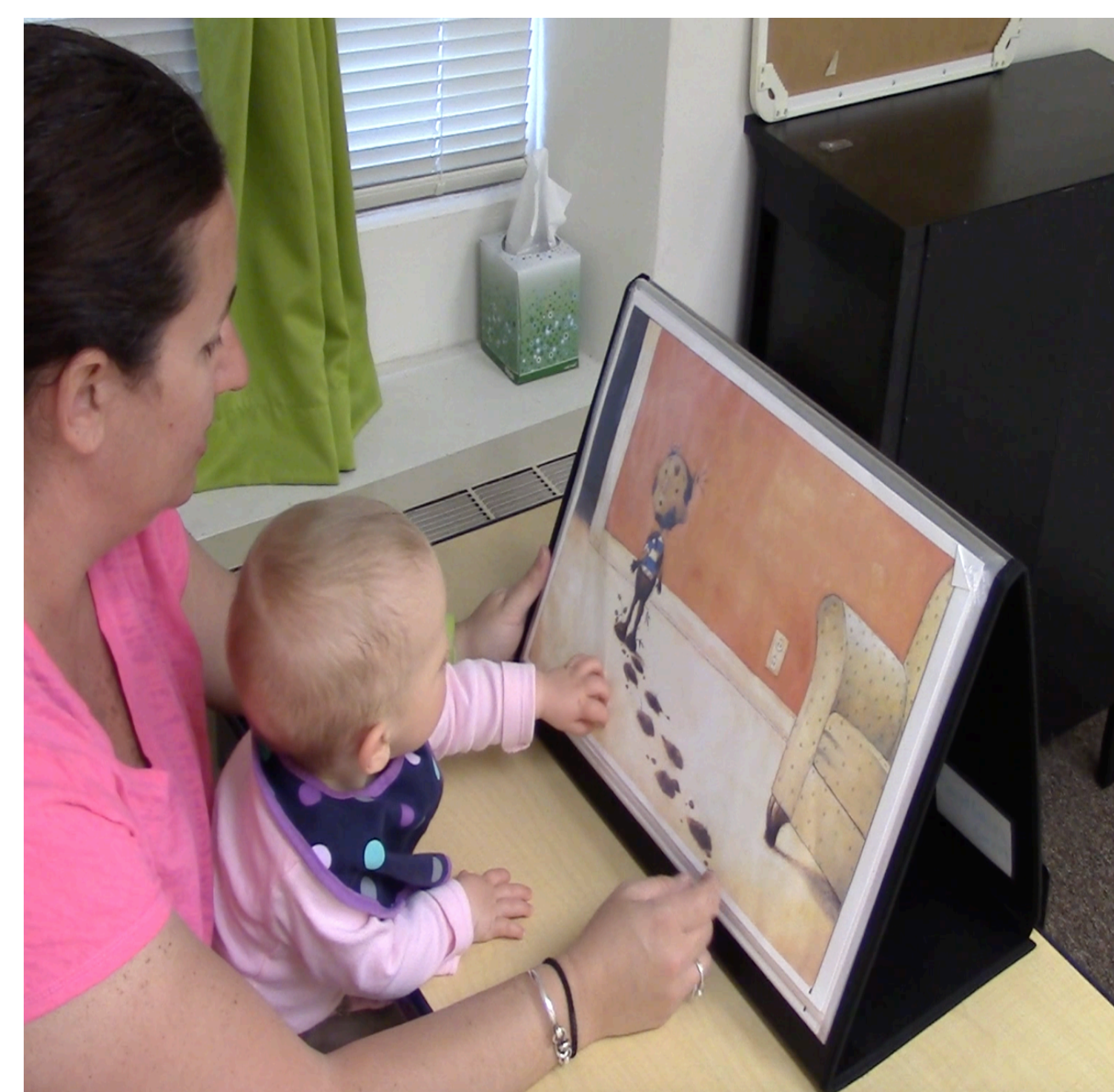
- Mother-infant dyads read a picture book together
- Mothers complete demographic forms and the MacArthur vocabulary assessment about their infants
- Interactions were video recorded, transcribed, and coded
- Analysis of maternal speech content and impact on infant receptive and productive vocabulary

Presented at Duke University Visible Thinking Undergraduate Research Symposium 2019

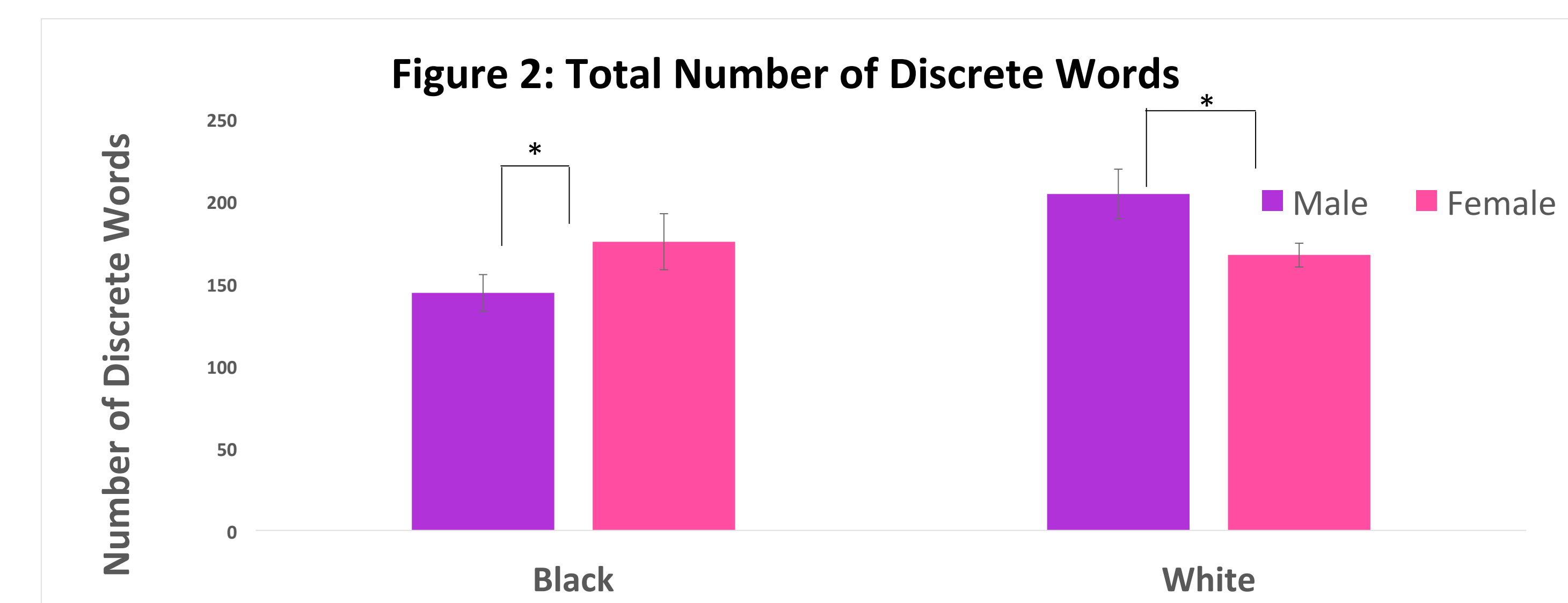
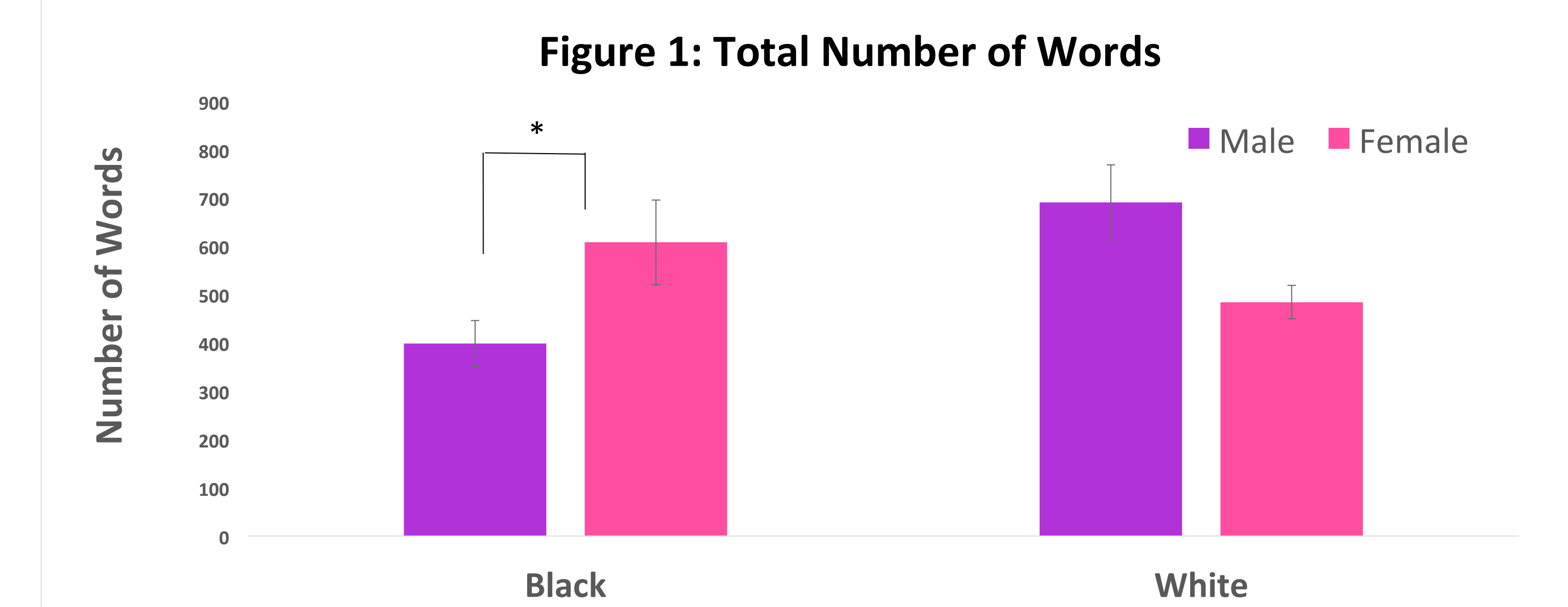
CODING VARIABLES



This diagram demonstrates the way maternal speech is categorized and compared across Black and White participants



RESULTS



- Black male infants received significantly less total words, discrete words, verbs, and pronouns and proper nouns than Black female infants and White male infants
- Positive emotion words, adjectives, and total number of words used by White mothers were predictive of their infant's productive vocabulary; no such trend for Black mothers

DISCUSSION

- Understanding cross-cultural learning behaviors is the first step in improving vocabulary and literacy outcomes for children from diverse backgrounds
- The effect of culture on child vocabulary growth is made even more complex when accounting for gender differences
- Need more salient measure to predict receptive vocabularies

FUTURE DIRECTIONS

- Analyze speech content during mother-infant playtime
- Expand study to Hispanic/Latino populations
- Evaluate impact of paternal speech on infant vocabularies

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