

# **The Culture of Communication: Understanding how Culture Infuses Everyday Interactions**

Catherine S. Tamis-LeMonda  
New York University

Presented to the Center for Children and Families  
University of Texas at Dallas  
March 26, 2021

# Communication

Language & gestures are universal, culturally organized features of social life and primary vehicles for enculturation and learning

# Culture

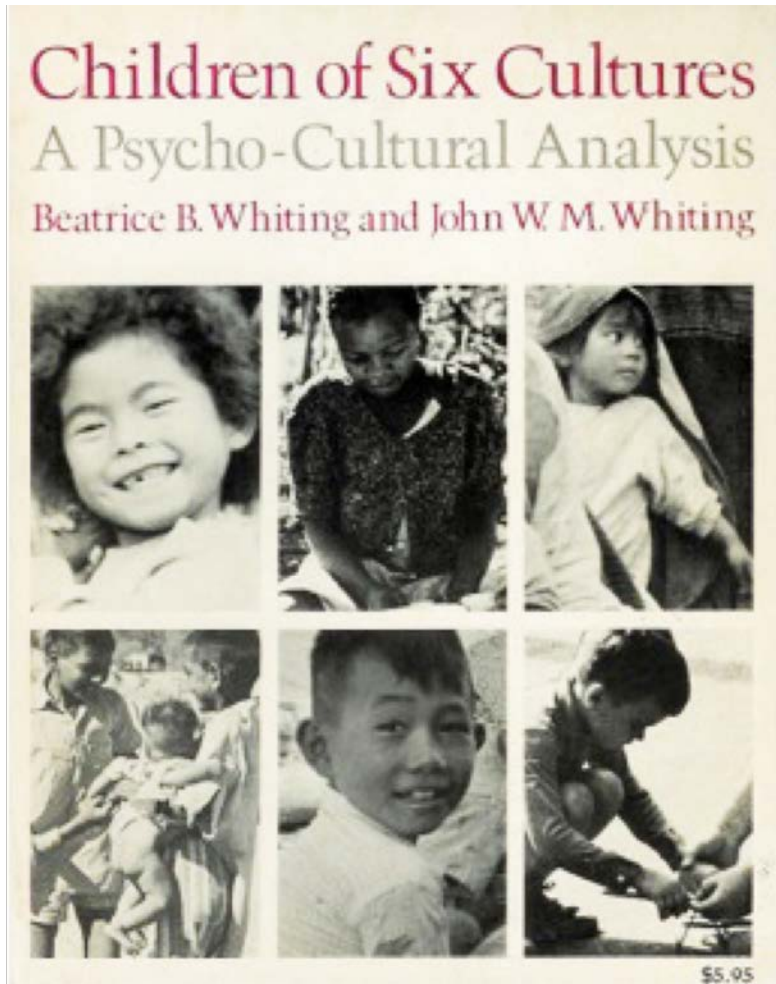
- Communication is a cultural expression
  - *How* to communicate (through gaze and gesture, body contact and movement, language)
  - *What* to communicate about (the purpose of communication and the content of communication)

# Culture infuses communication



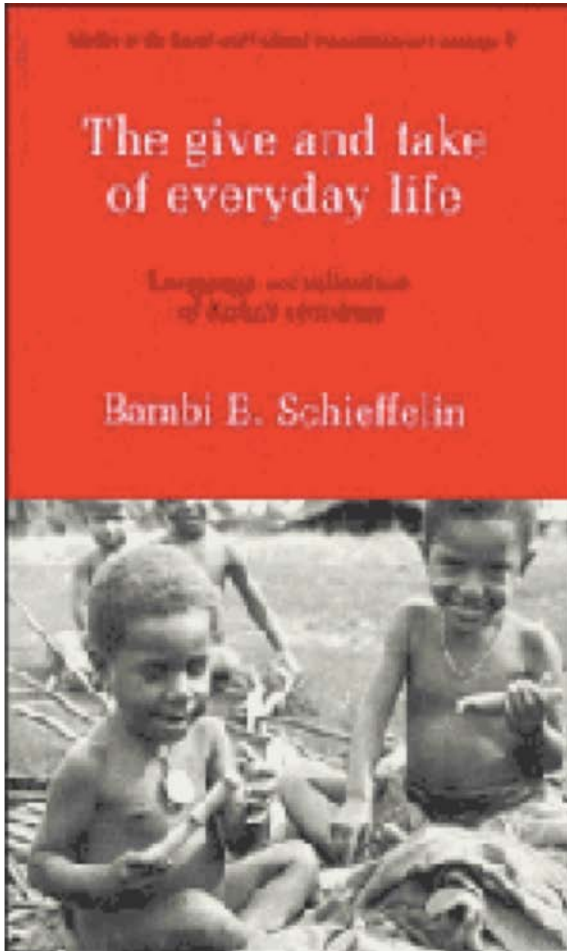
# Language to teach about the world

# The Whittings



- Naturalistic observations of children in their everyday behavior settings
- Examined the customary practices of parents in Mexico, India, Kenya, New England, Okinawa, and the Philippines

# Schieffelin and Ochs: Kaluli and Samoan



# The communication accommodation continuum



## **Child-centered**

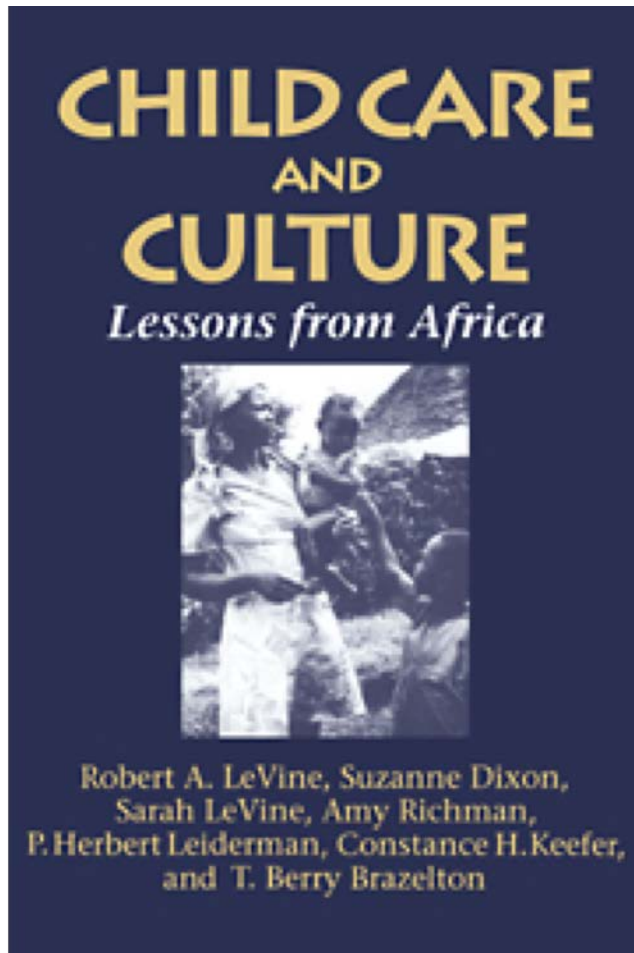
- ✓ Talk about what is of interest to the infant and high responding to infant
- ✓ Use of a special register in infant-directed speech
- ✓ Engage infants as conversational partners and accommodate to infant communications and needs

## **Situation-centered**

- ✓ Parents talk about what is relevant, rather than the interests of infant
- ✓ Use of adult register when addressing infant
- ✓ Responsibility on infants to figure out what is going on around them and how to enter ongoing activities



# Levine: The Gusii of Kenya



- Subsistence farmers, with household responsible for growing food for survival
- Children expected to assist with household chores, cultivation, and food-processing from an early age

# Levine: Gusii of Kenya



- Child obedience and responsibility valued and expected: Aided survival and permitted mothers to complete chores
- Mother goal is to prevent crying and arousal
- Little verbal stimulation; much time feeding, holding, and lulling infants to sleep

# Mayan communities



Rogoff, 1990, 2003

# Rogoff: Learning through observation



auren Greenfield/VII (Original photograph in a

## Our Research:

# Communication as a Window into Culture

- How is culture expressed in communications between parents and children from different ethnic/racial communities in the United States?
- How do cultural practices promote specific skills and ways of thinking and acting in children?

# Socializing Culture: Three Sets of Studies

1. Socializing culture through modes & style of communication (infancy & toddlerhood)
2. Socializing cultural values and expectations through story narratives & play (preschool)
3. Socializing cultural expectations around academic achievement in stories (1<sup>st</sup> grade)

# General Methods

# NYC Participants

- Mexican immigrants
- Dominican immigrants
- Chinese immigrants
- African American





# NYC Participants

- Mothers recruited from hospitals and clinics
- Home visits at 14 months, 2 years, 3 years
- Laboratory visits at 4 and 5 years, 1<sup>st</sup> grade
- Note: All videos openly available at [databrary.org](http://databrary.org)



# Why these groups: demographics

- Mexican, Dominican, Chinese large immigrant groups in the United States, low SES
- African American: contrasting low SES sample with a long history in the United States; native, 3rd generation
  - attempt to avoid the SES-ethnicity/race confound

# Why these groups: Cultural views

- Chinese and Confucian values
  - Achieving “perfection” (particularly in academics)
  - Familial piety (role of parent strong)
  - Humility & emotional restraint

# Why these groups: Cultural views

- Chinese parents hold high expectation for and feel low satisfaction with children's school performance in comparative studies
- Emphasis on “*self improvement*”
  - parental high negative feedback focused on failure as a way to learn and improve (Ng & Pomerantz)

# Why these groups: Cultural Views

- African American:
  - Parents schooled in “individualistic” United States
  - Aware of academic risks; discrimination
  - Childrearing goals of high self-esteem and high “leadership” to protect children from risks
  - A focus on “*self enhancement*”

# Why these groups: Cultural Views

- Mexican (recent immigrant group)
  - Values of respect and obedience
  - Learn through observation & guided participation
  - But, mothers express high concern that their children “learn language” (Tamis-LeMonda, et al., 2009)
- Dominican
  - Contrasting Latine group (in US longer)

# Why these groups: Academics

- Children from Latine and African American households display disparities in school readiness and subsequent academic performance (“at-risk” minorities)
- Children from Chinese households excel in school, despite being from immigrant and low-income families (the “ideal” minority)

# Study 1: Infancy & Toddlerhood

Socializing culture through modes of  
communication



# Cultural communication in infancy

Do mothers from different ethnic backgrounds differ in:

– *How* they communicate:

- Through the use of language or gesture
- Their responsiveness to infants' vocalizations & gestures
- Behaviors that emphasize authority & obedience

– *What* they communicate:

- Whether communications function to inform or regulate

# Methods

- Mothers and infants videorecorded during different tasks, including:
  - Sharing wordless number book
  - Sharing wordless emotion book
  - Stringing beads
  - 3-bag (book, grocery, cottage) in Dallas sample
- Infants assessed on multiple skills (language, gestures, fine motor)

# Behavioral coding

- From videorecordings
- Onsets and offsets of mother and infant gestures and vocalizations coded using Interact and Datavyu software

# Mothers' Referential Communications

- Referential communications teach “what” or about the world
  - Provide information or ask about activities, events, objects
    - E.g., using hands to indicate how big or small object is
    - E.g., “That’s a red ball”, “Are you stirring the food?”

# Mothers' Regulatory Communications

- Regulatory communications teach “how” to act in the world
  - Guide attention and action
    - E.g., “pointing” where to place next bead, how to stir with spoon
    - E.g., “Look at that!”, “Put it there.” “Don’t do that”

# Referential language & gestures

# Regulatory language & gestures

Bead-stringing at 14 months

# Regulatory language & gestures

Bead-stringing at 14 months



# 14-Month Infant Measures

- *MacArthur Communicative Development Inventories (MCDI):*
  - Size of infant gesture vocabularies
  - Receptive vocabulary size
  - Productive vocabulary size

# 2 Year Infant Measures

- *Fine Motor/Action Skills:*
  - Mullen Scales of Infant Development: Fine Motor and Visual Reception Subscales
    - “Put this one in”
    - “Put them together”
    - “Put another one in there”
- *Receptive & Productive Language*
  - Mullen Scales of Infant Development subscales

# Culture and communication in infancy

- Hypotheses:
  - Mexican mothers will use and respond to gestures more than Dominican and African American mothers
  - Mexican and Dominican (Latino) mothers will use more regulatory language than African American mothers who will use more referential language (teaching “what” vs. teaching “how”)

# Culture and communication in infancy

- Hypothesis
  - Cultural differences in mother communication will play out in children's emerging skills
  - Specifically, mothers' gestural communications will relate to infants' gestures and fine motor skills; mothers' referential language will promote language skills

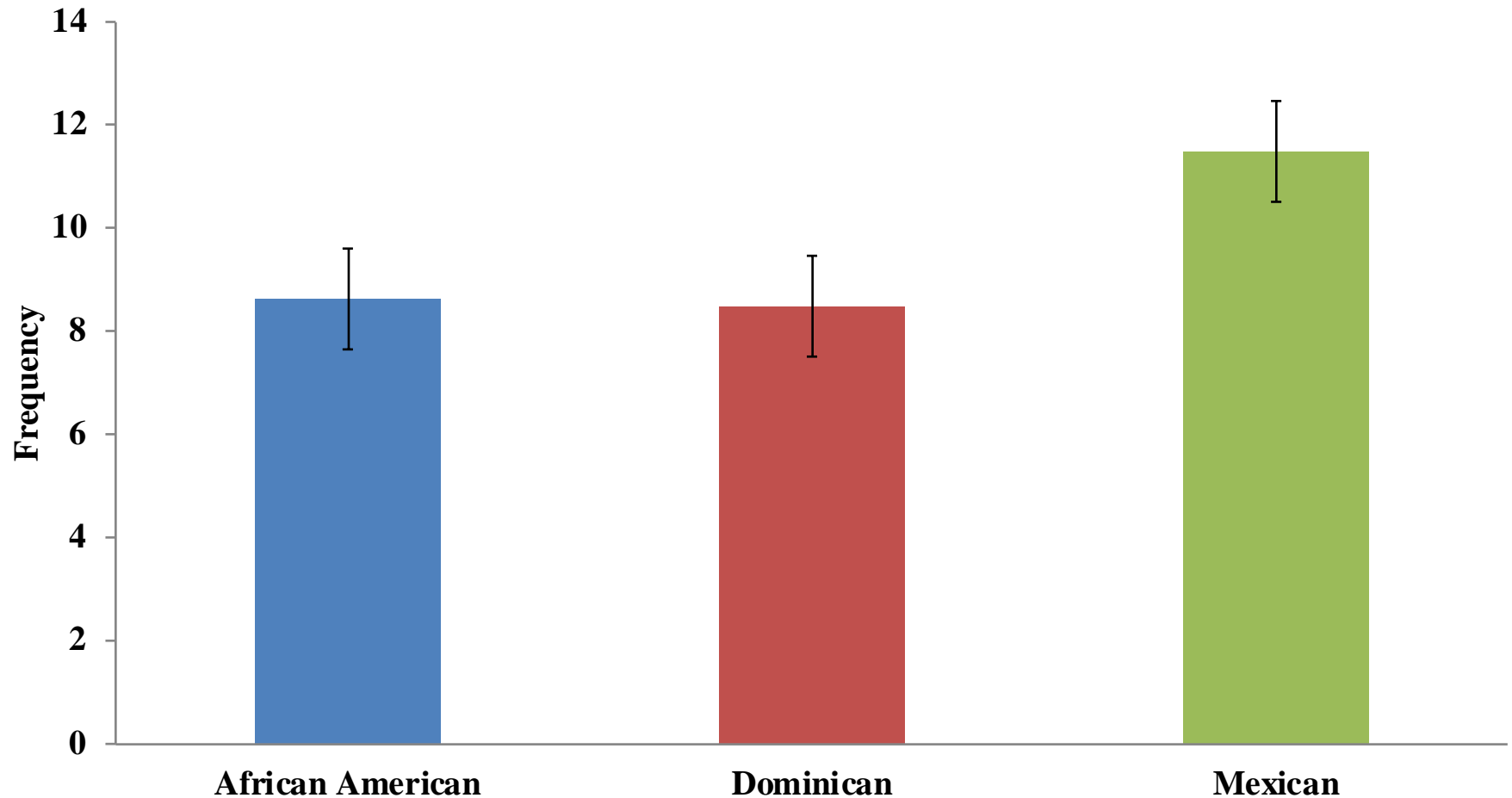
# Findings: Mothers' communications

Mothers of different cultural communities differ in their use of gestures and language

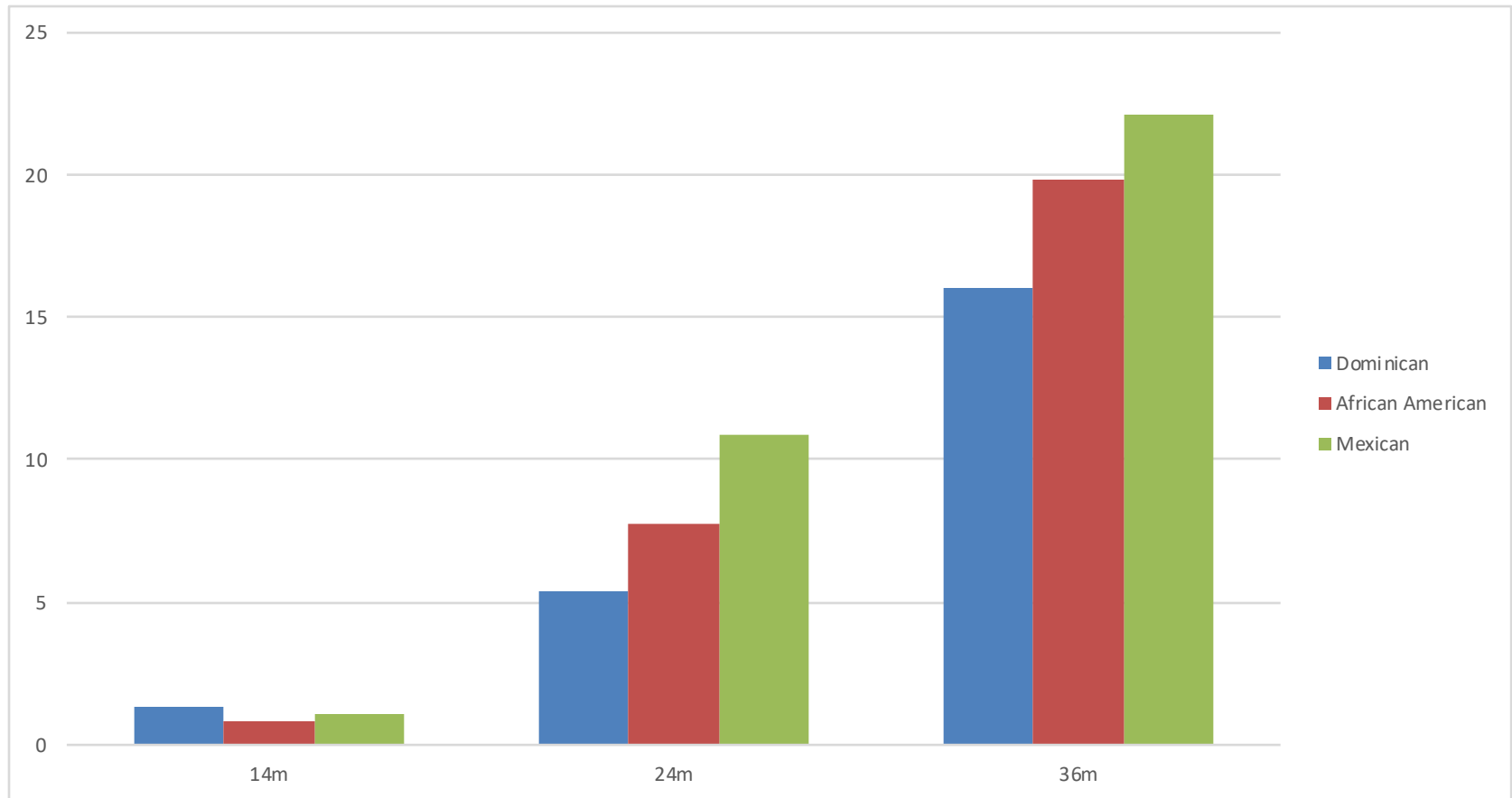
# Referential-Regulatory language & gestures

- Referential language higher in African American mothers than in Latine mothers
- Regulatory language higher in Latine mothers than African American mothers
- Gestures highest in Mexican mothers

# Mothers' Gestures to 14-Month Olds



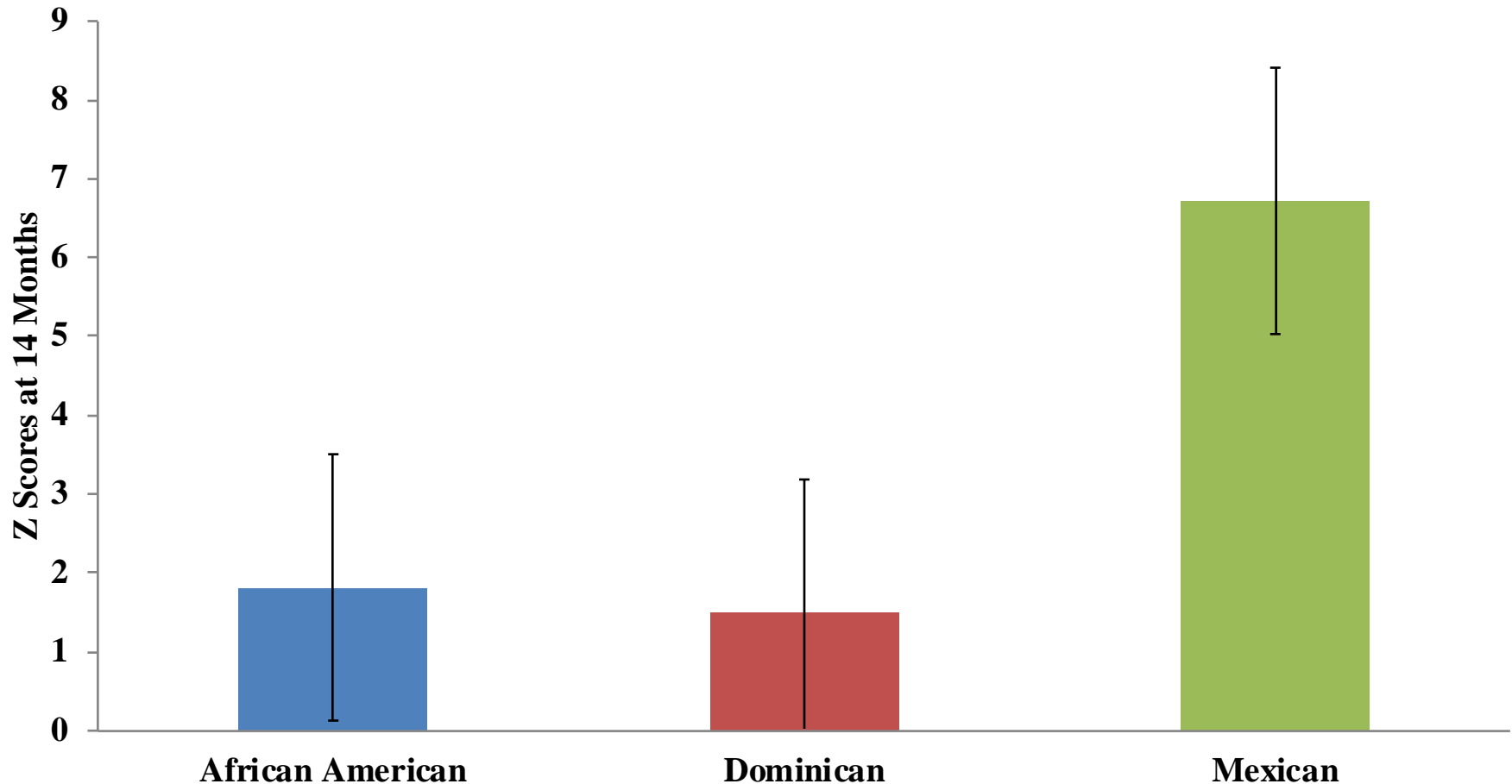
# Mothers' Gestures during Beadstringing



Luo & Tamis-LeMonda (2016), *Infancy*



# Mothers' Responses to Infant Gesture with Referential Language



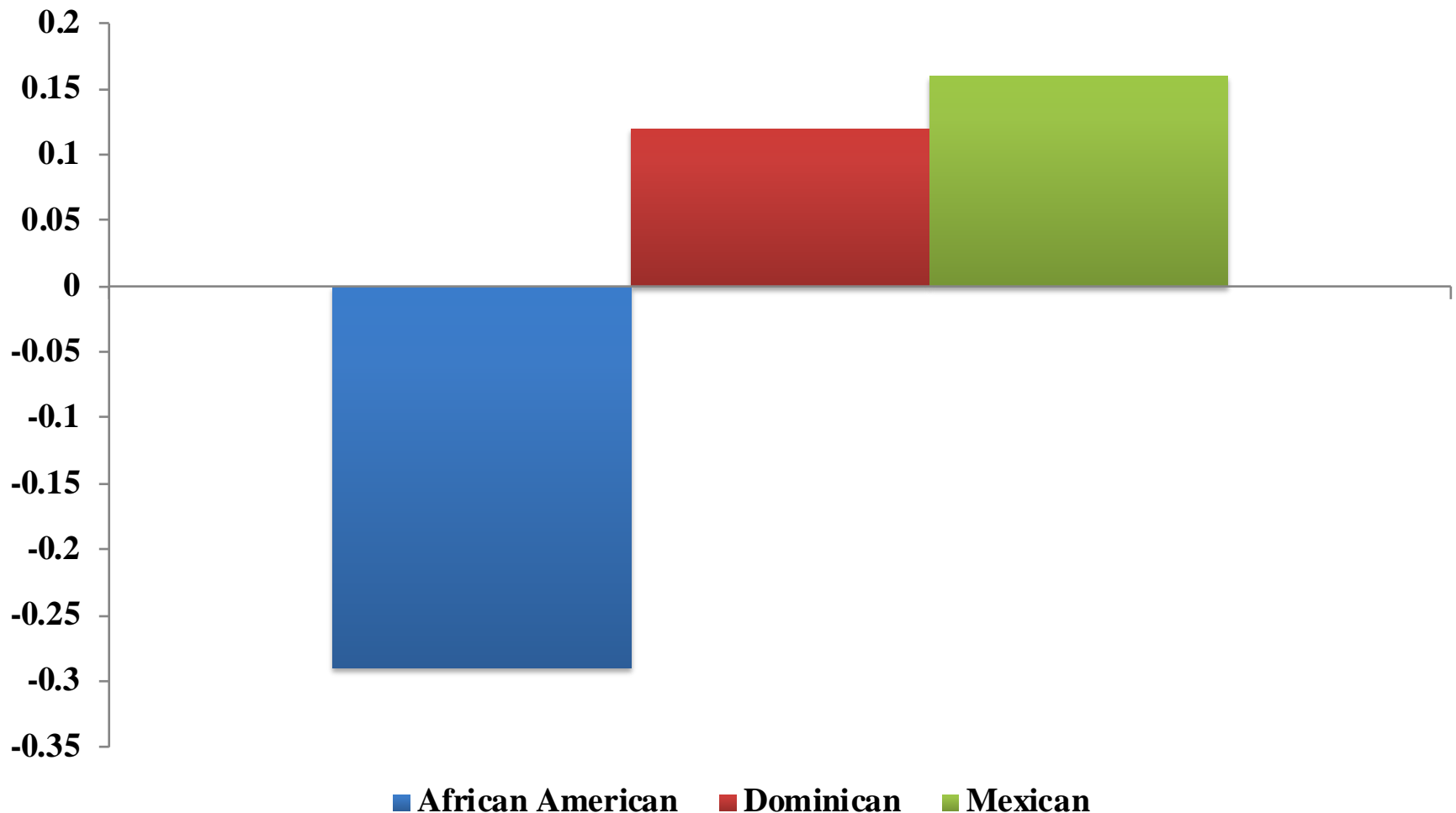
# Findings: Culture & Infant Skill

Cultural differences in mothers' communication relate to children's communications and emerging skills

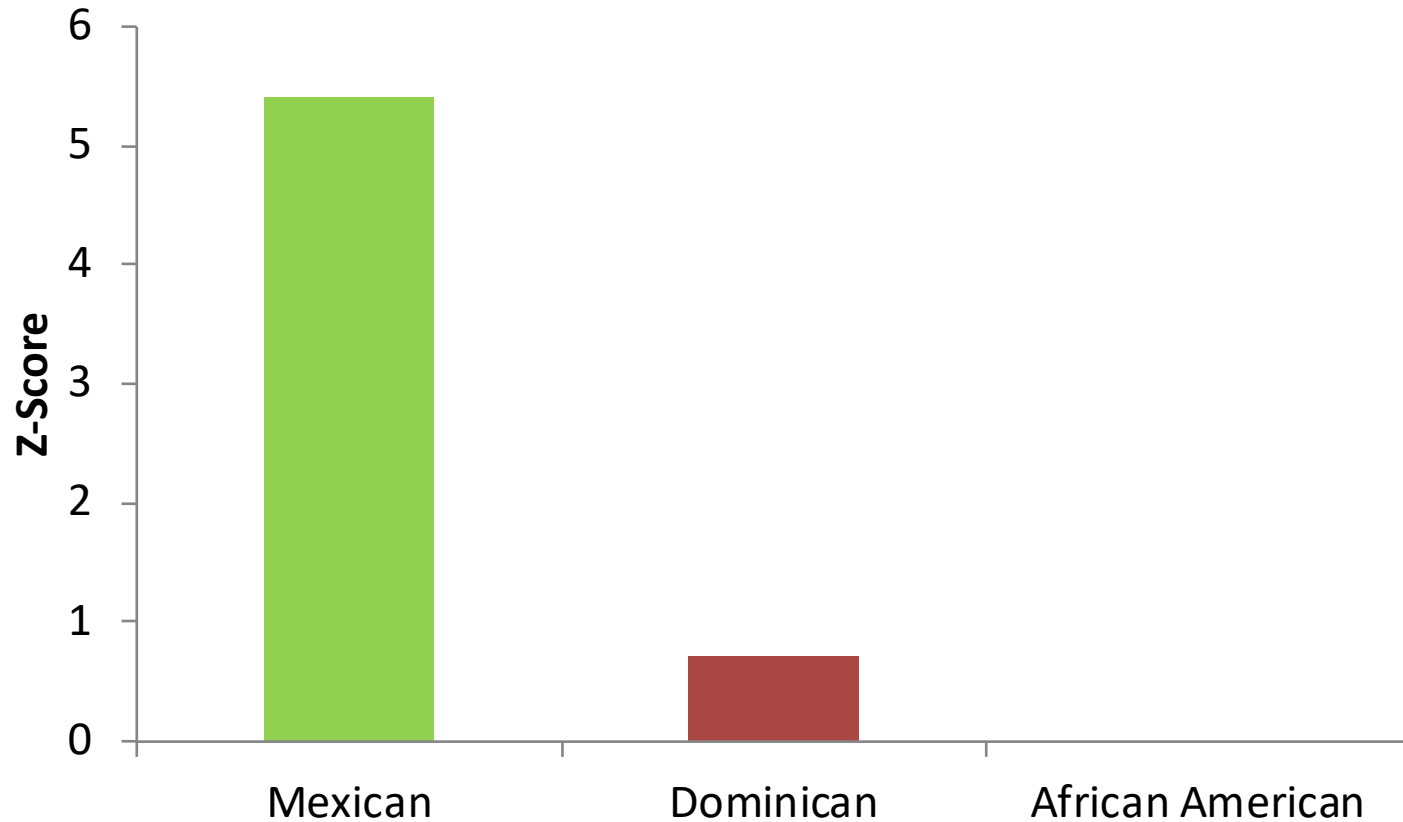
# 14-Month Skills

# Infants' Gestures at 14 Months

## Standardized MacArthur

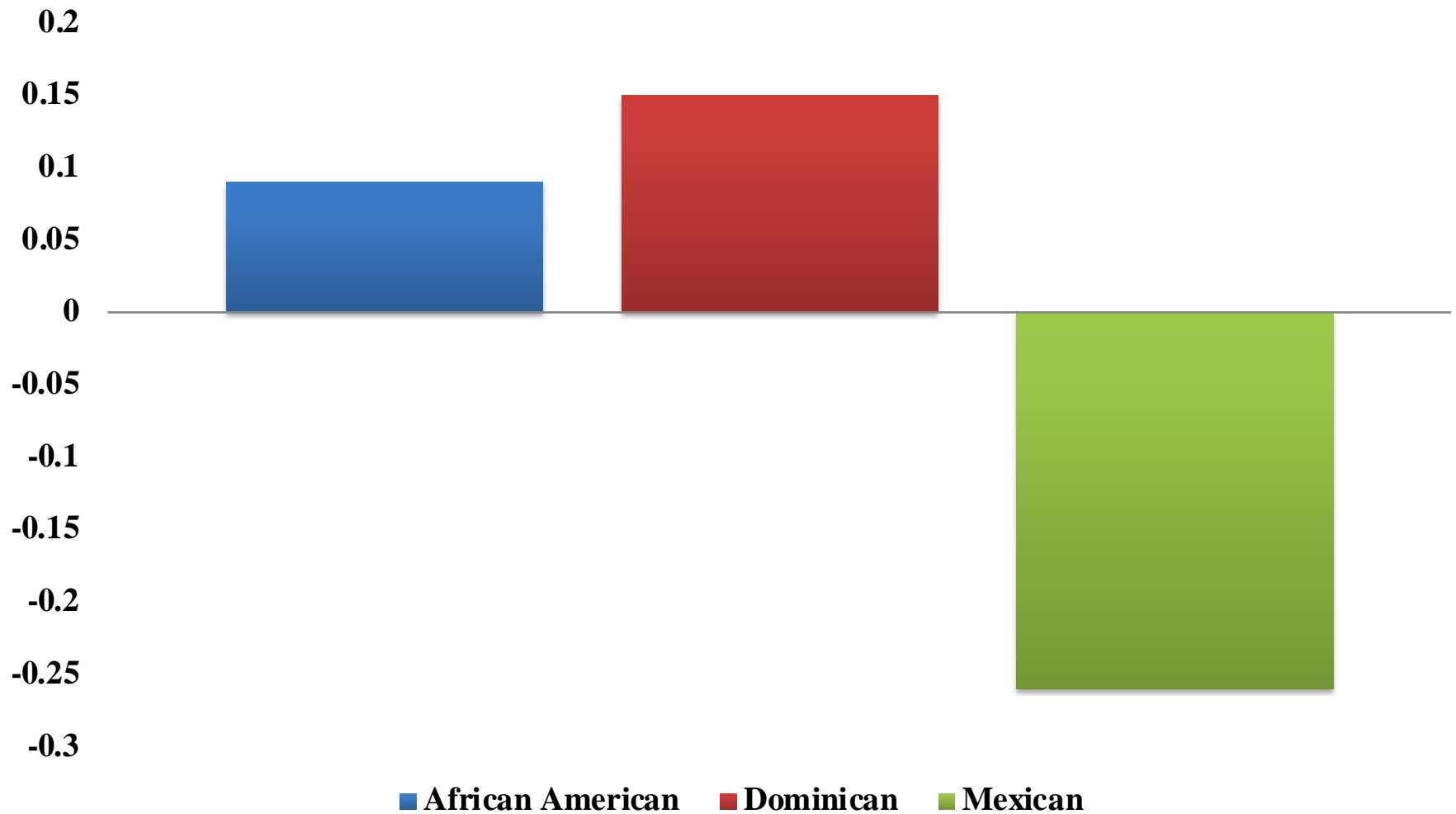


# Infants' Gestural Responses at 14 Months to Mothers' Referential Language



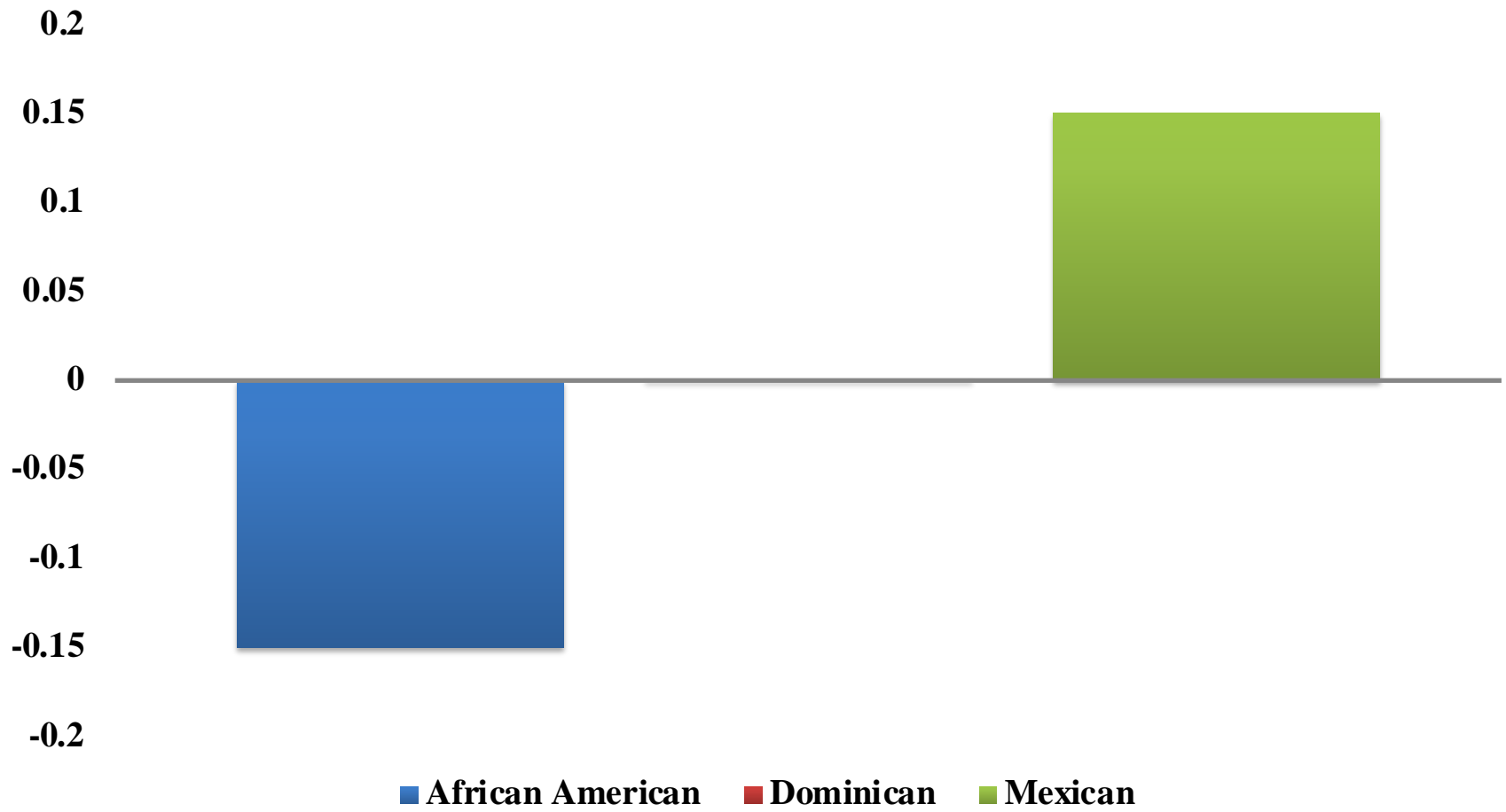
Kuchirko, Tafuro, & Tamis-LeMonda (2018), *Infancy*

# Infants' Language Production at 14 Months: Standardized MacArthur



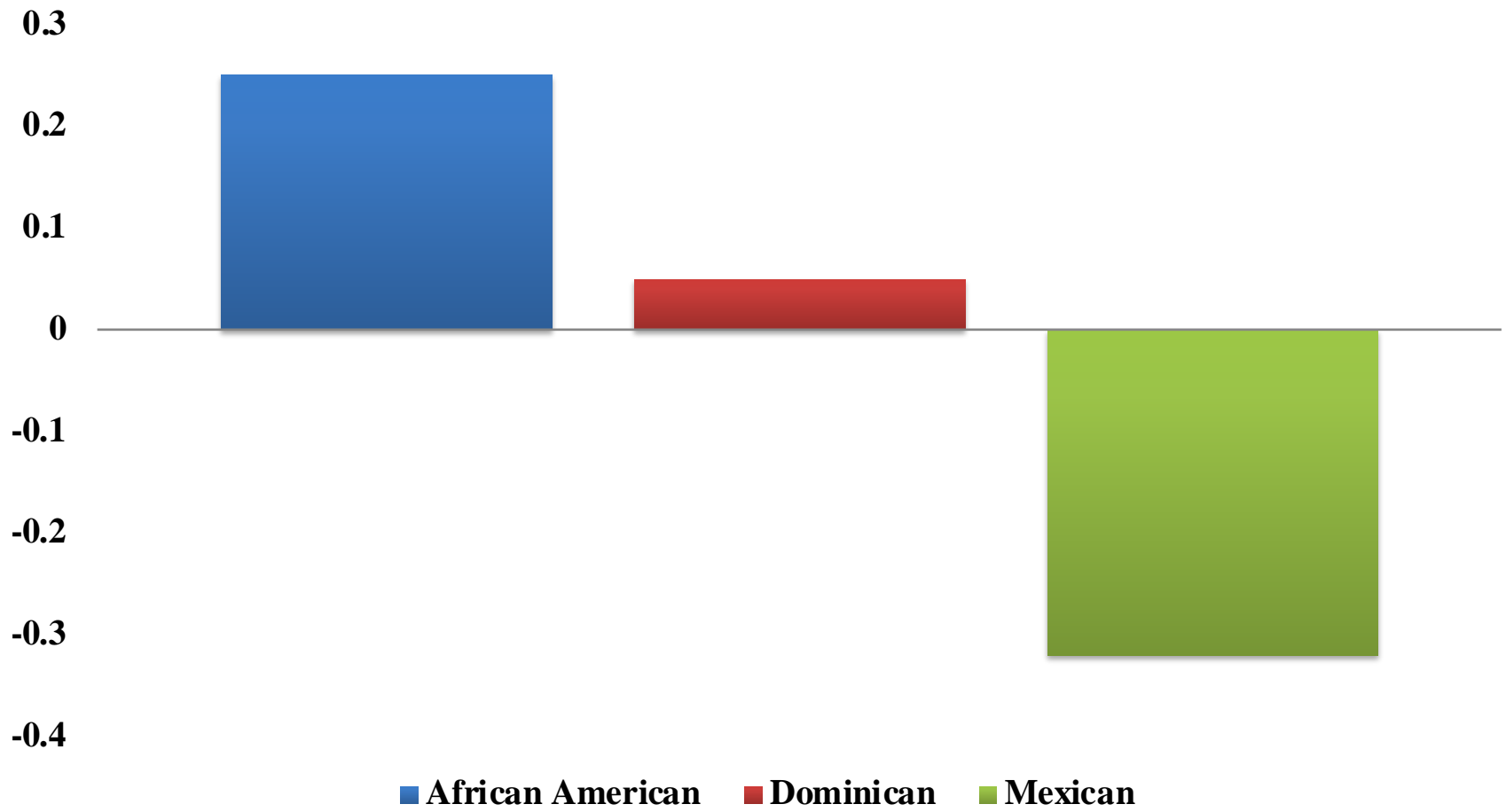
# 2-Year Skills

# Infants' Fine Motor/Action Assessments Standardized





# Infants' Expressive Language Assessments Standardized



# A cultural lens

- Gestures convey important spatial information that may support specific skills
- Mexican mothers' relatively high use of gesture & regulatory language may reflect a cultural emphasis on respect

# Respeto during dyadic play

- Current collaboration with Margaret Owen, Raul Rojas-Villareal, et al.
- How do mothers convey the cultural value of respect in everyday play?
- Does such an emphasis support (or hinder) toddler language learning?

# Dallas Participants

- 128 Mexican heritage (Spanish-speaking) immigrant mothers & their 2.5-year-olds
- Dallas Preschool Readiness project (PI's Owen & Caughy)



# Videorecordings of mother-toddler play



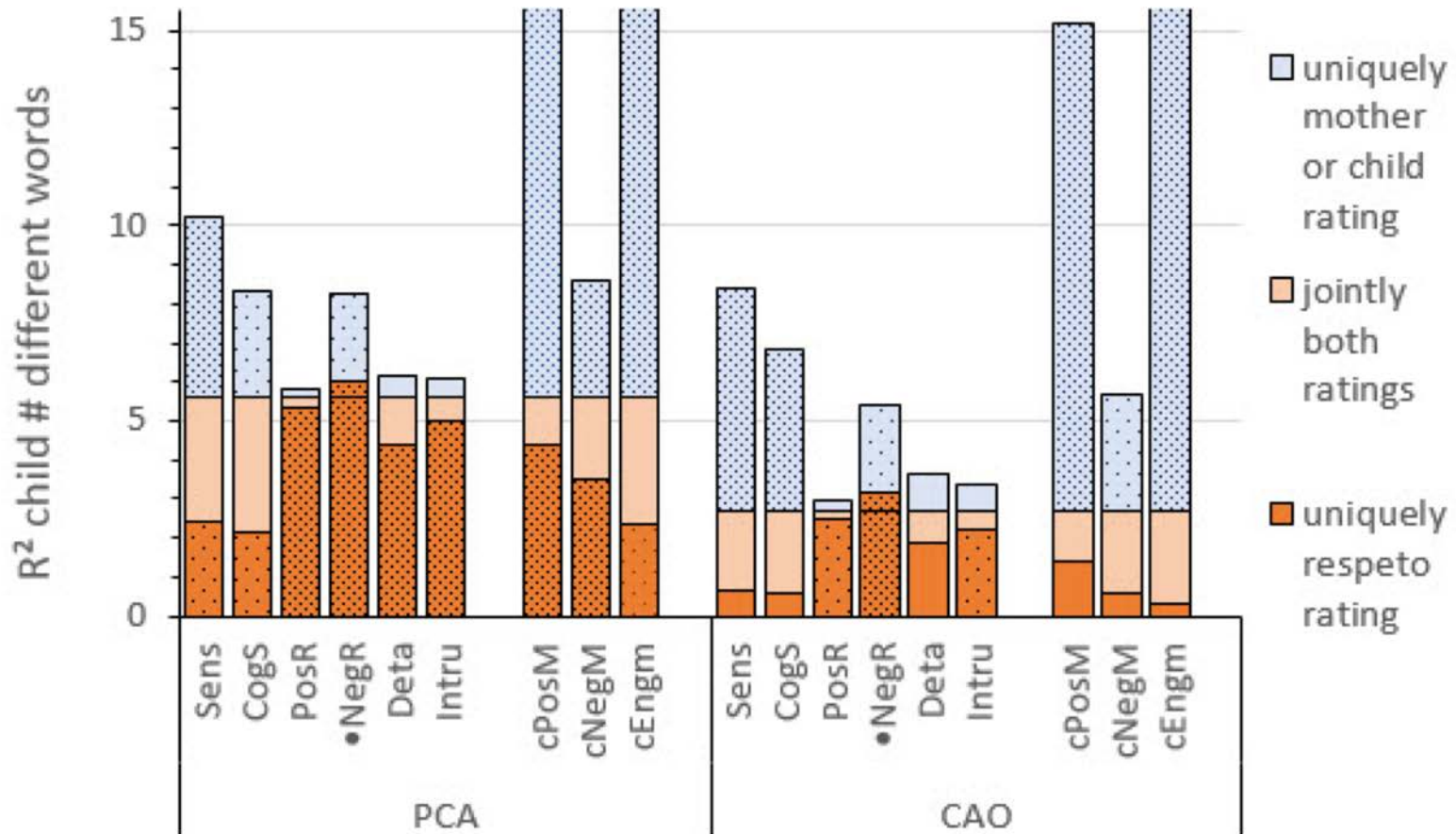
# Ratings of respeto

- Global ratings in Mexican dyads
  - Focus on the dyad
  - Mothers' calm authority
  - Toddlers' affiliative obedience
- Parent calm authority is not “parental control”:
  - Characterized by positive demeanor on the part of adults that is met by a child who is happy to please

# Language coding

- Children's utterances (responsive and spontaneous) & different words
- According to “authoritarian” interpretation, respeto should relate negatively
- According to a cultural interpretation, respeto should relate positively

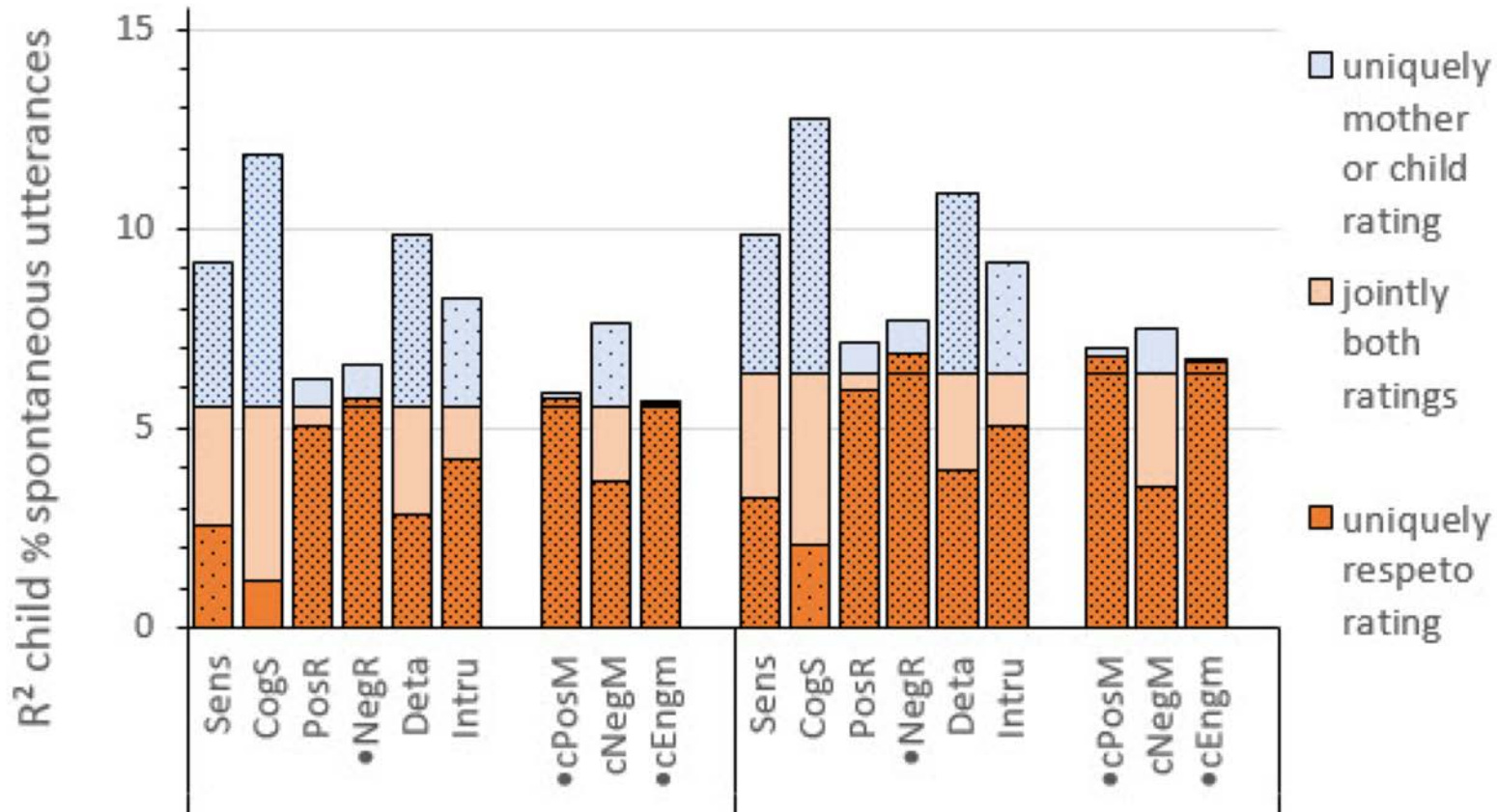
# Respeto uniquely predicts child word types



Tamis-LeMonda, Caughy, Bakeman, Adamson, Owen, et al., (2019), *Soc Dev*



# Respeto uniquely predicts children's *responsive* (not spont) utterances



Tamis-LeMonda, Caughy, Bakeman, Adamson, Owen, et al., (2019), *Soc Dev*

## Interim summary:

### The “whats” and “hows” of communication

- Language & gesture convey information about the world and how to act in the world
- Cultural values infuse communications and play out in infants' & toddlers' emerging skills

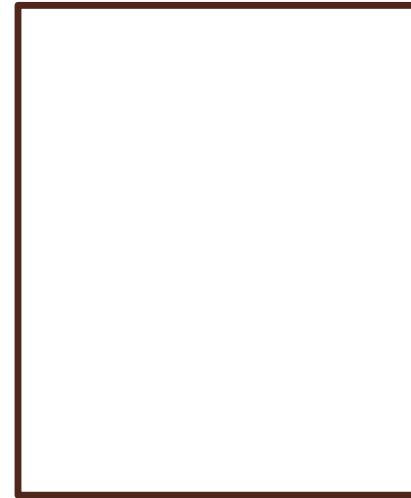
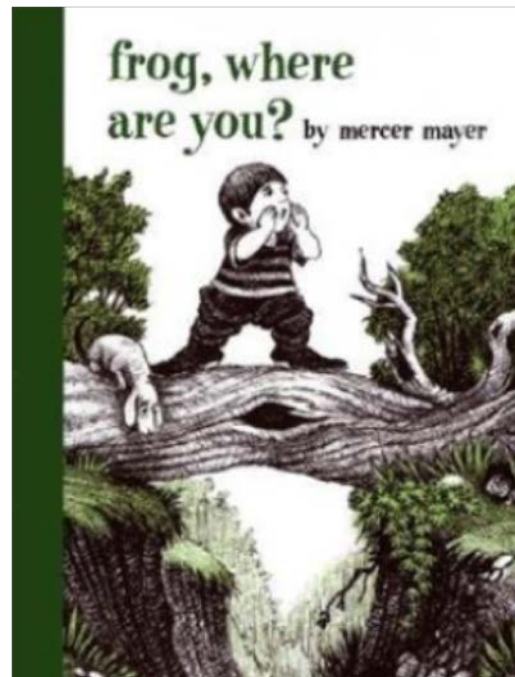
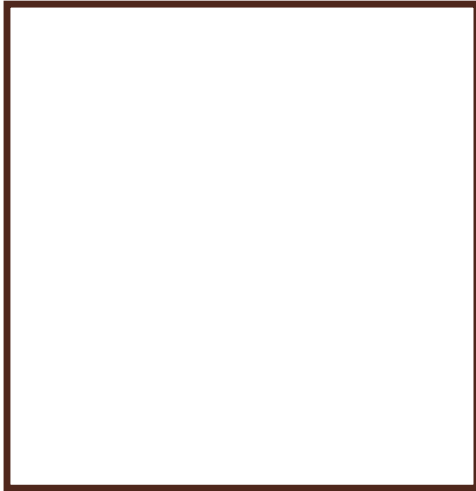
## Study Set 2: Preschool

Socializing cultural values through stories

# Socializing culture through stories

- Do mothers of different ethnic backgrounds emphasize different “lessons” when sharing wordless books with children?
- How do these differences relate to the themes expressed in children’s independent storytelling?

# Book-Sharing Task at Age 4



**“Please share this book with your child”**

# Narrative Coding Scheme

- The book is divided into a main episode which consists of a main event (problem) followed by 7 plans of action (attempts) to solve the problem; 6 failed and 1 successful.

## Problem

(frog escapes from the jar)



## Plans of Action

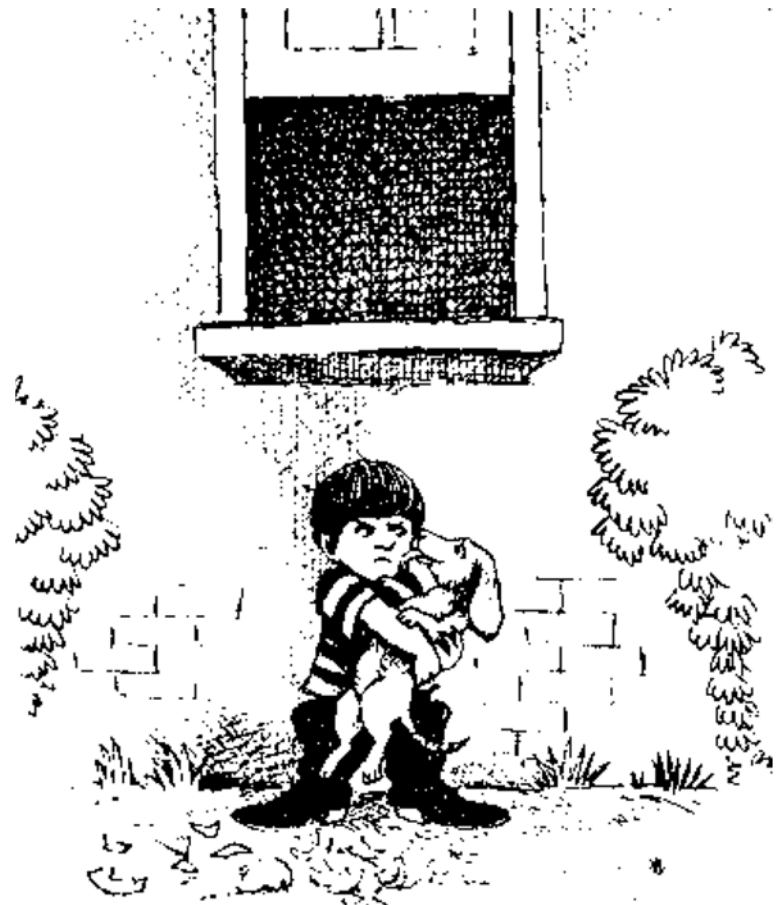
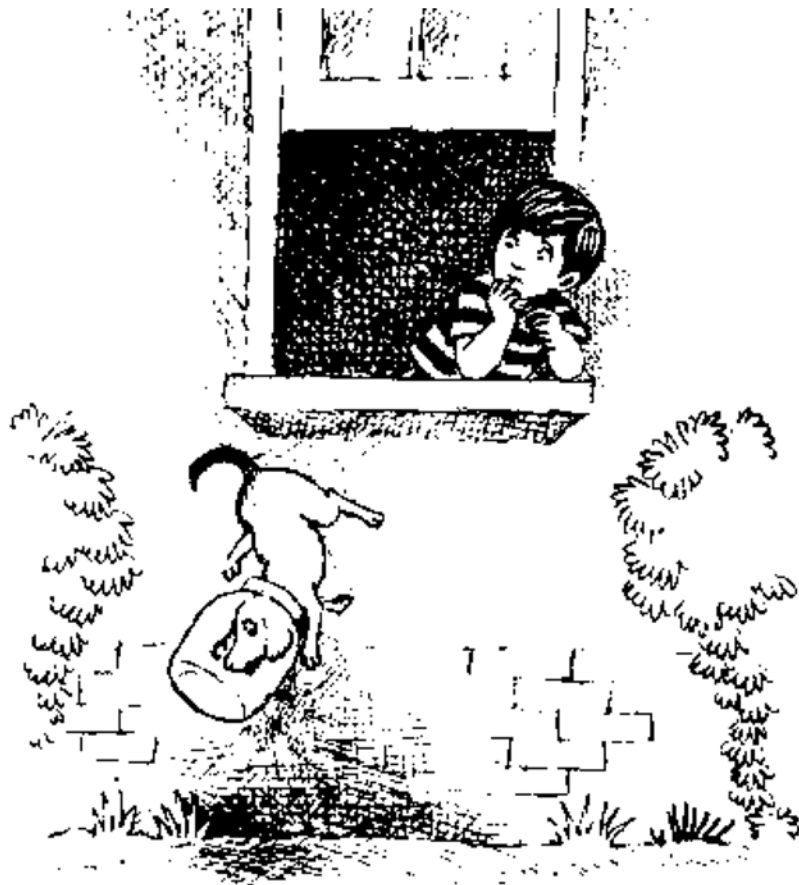
(attempts to find the frog)



# Findings: Mothers' messages in stories

Mothers from different cultural communities emphasized different aspects of the story

# Same Picture, Different Stories

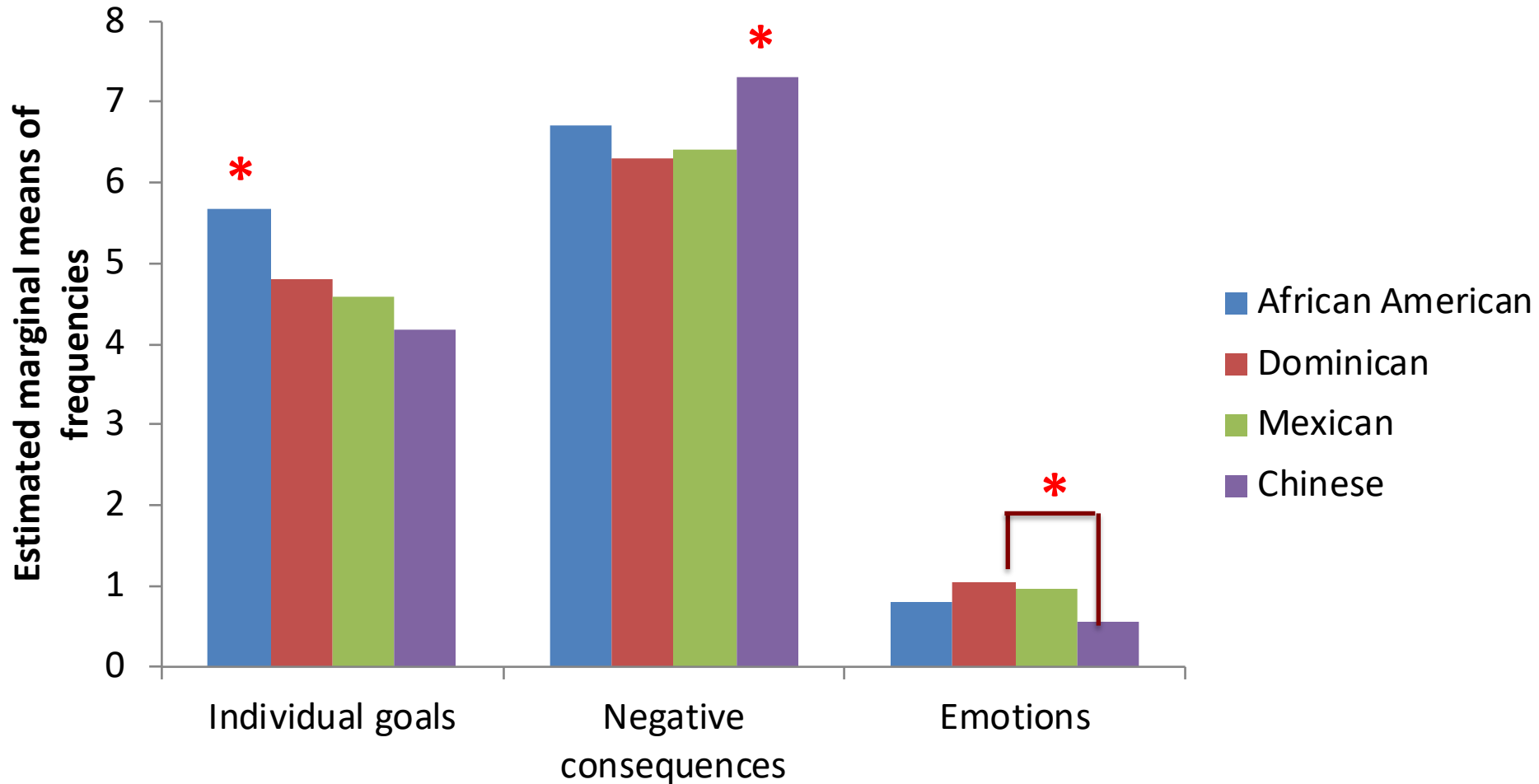




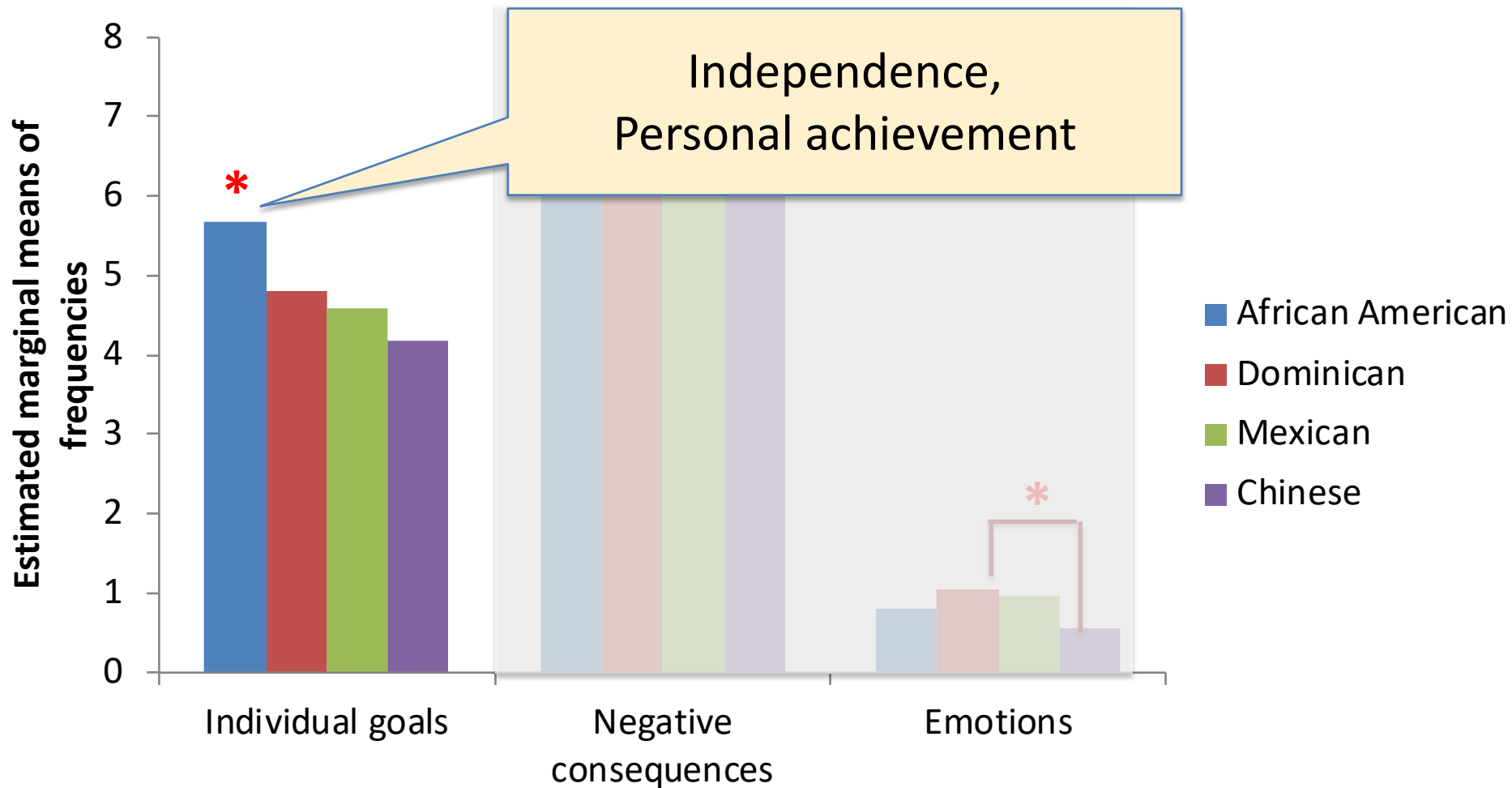
# Coding story content

Content	
Individual goals	<i>“He is look for frog in the forest.”</i> <i>“The boy is looking for the frog everywhere.”</i>
Negative consequences	<i>“The dog was chased by bees.” (after barking at a beehive)</i> <i>“The jar is broken!” (after the dog jumped out of the window)</i>
Emotions	<i>“The boy is scared.”</i> <i>“The boy is happy.”</i>

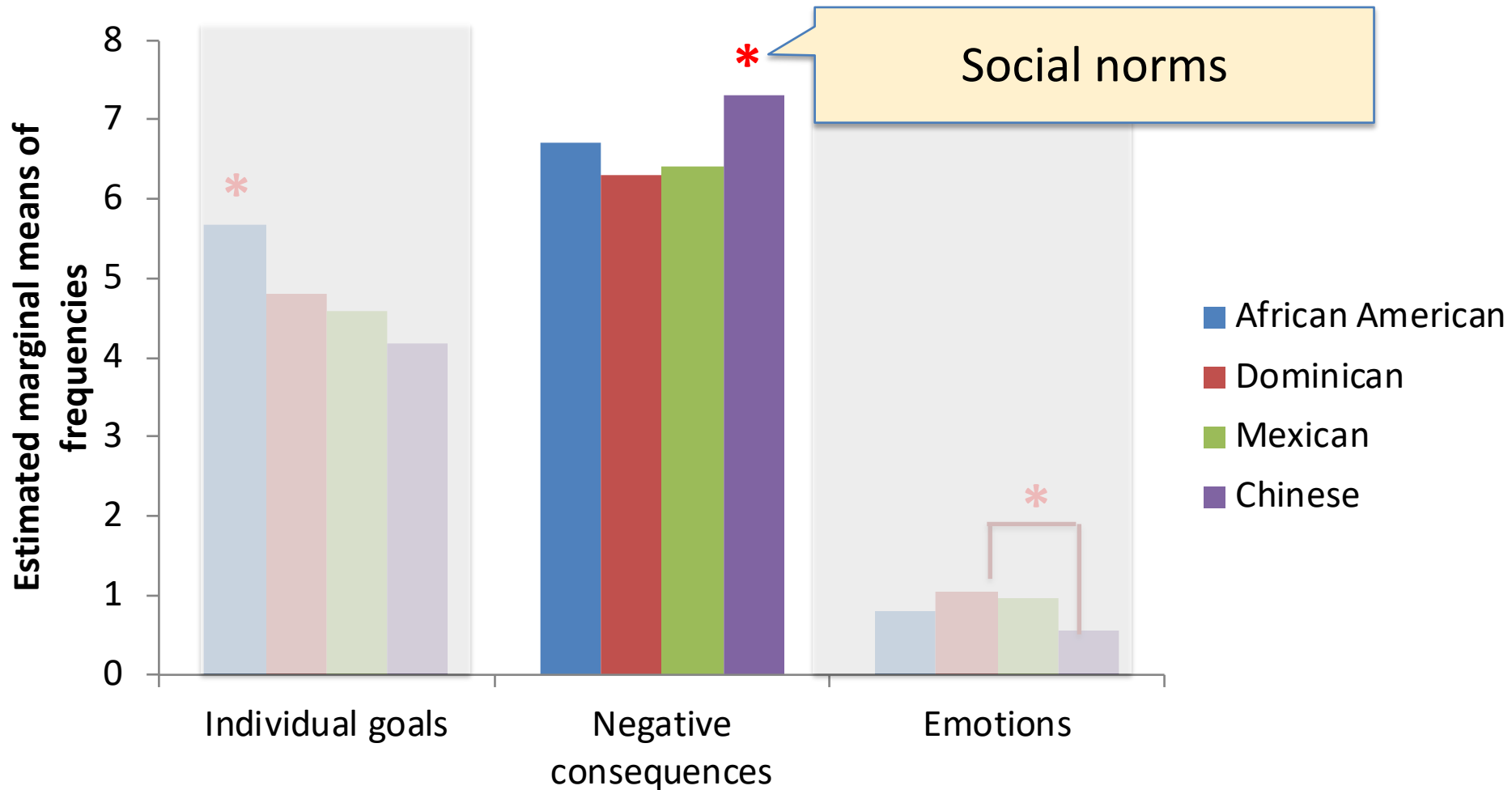
# Ethnic Differences: Story Content



# Ethnic Differences: Story Content

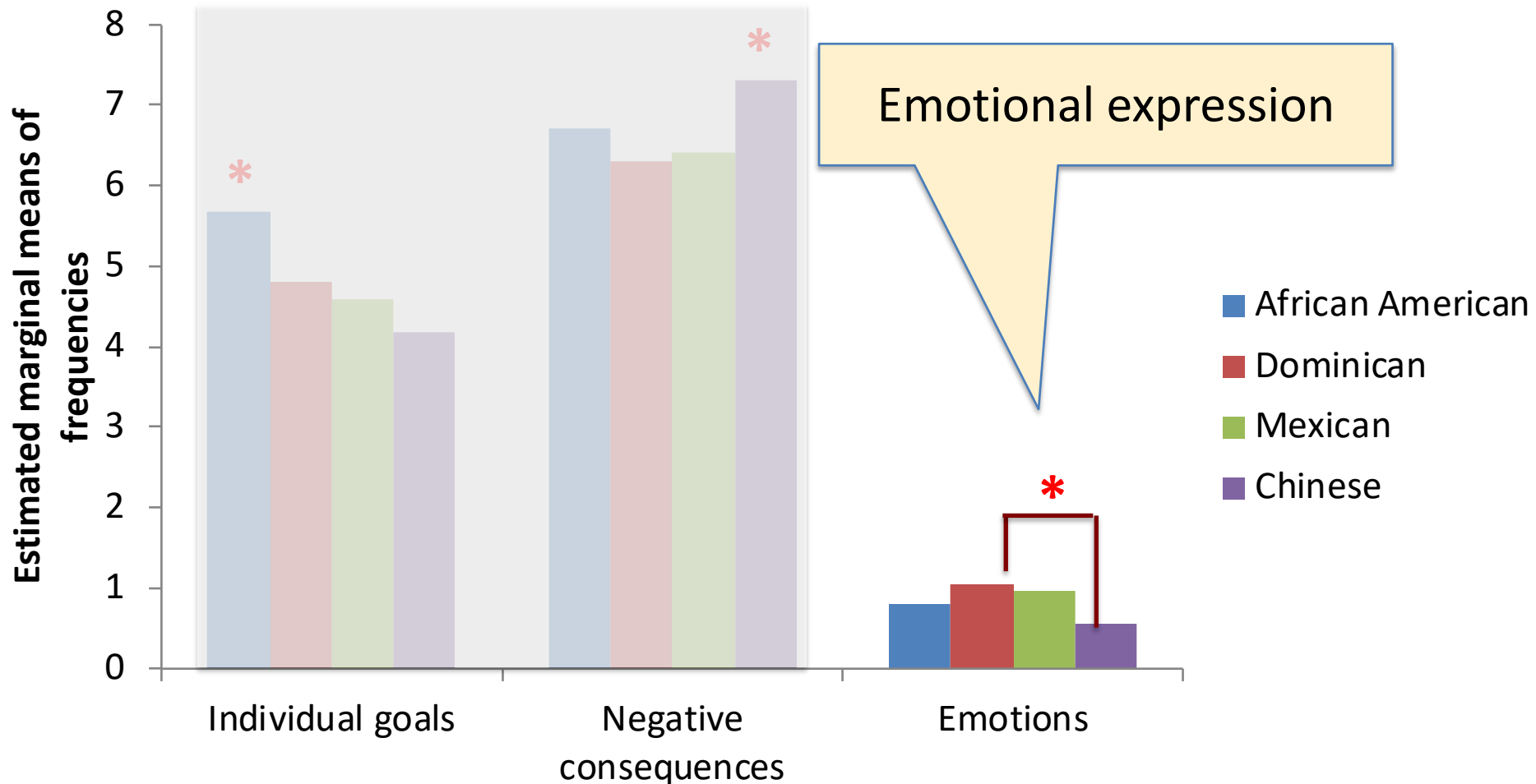


# Ethnic Differences: Story Content



Luo, Tamis-LeMonda et al. (2015) *J Lang Literacy*

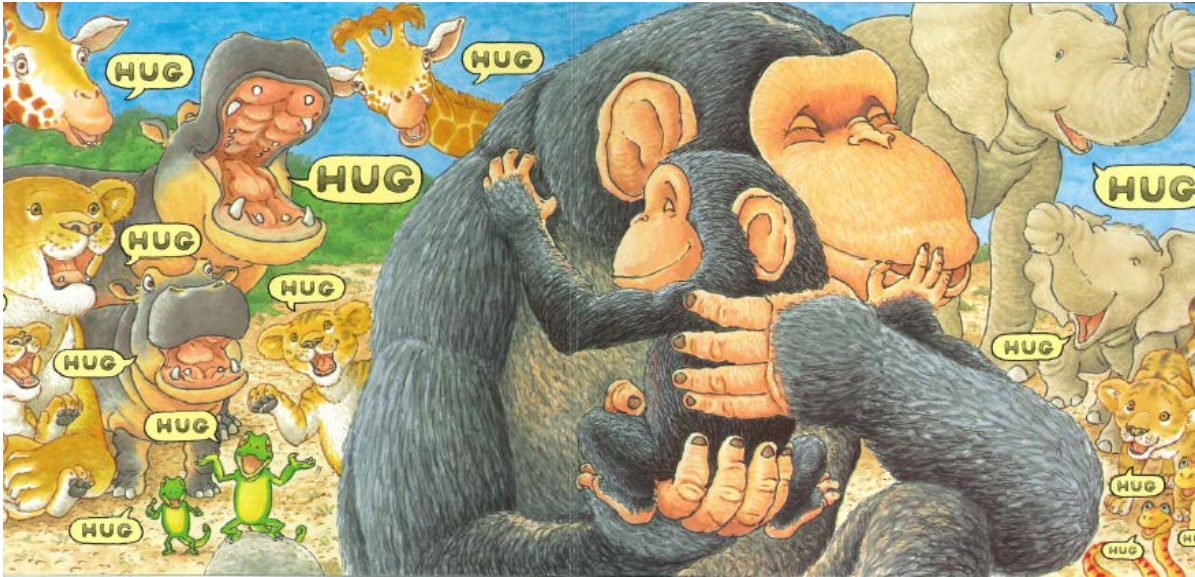
# Ethnic Differences: Story Content



## Findings: Children's stories

Cultural differences in mothers' themes related to children's storytelling themes

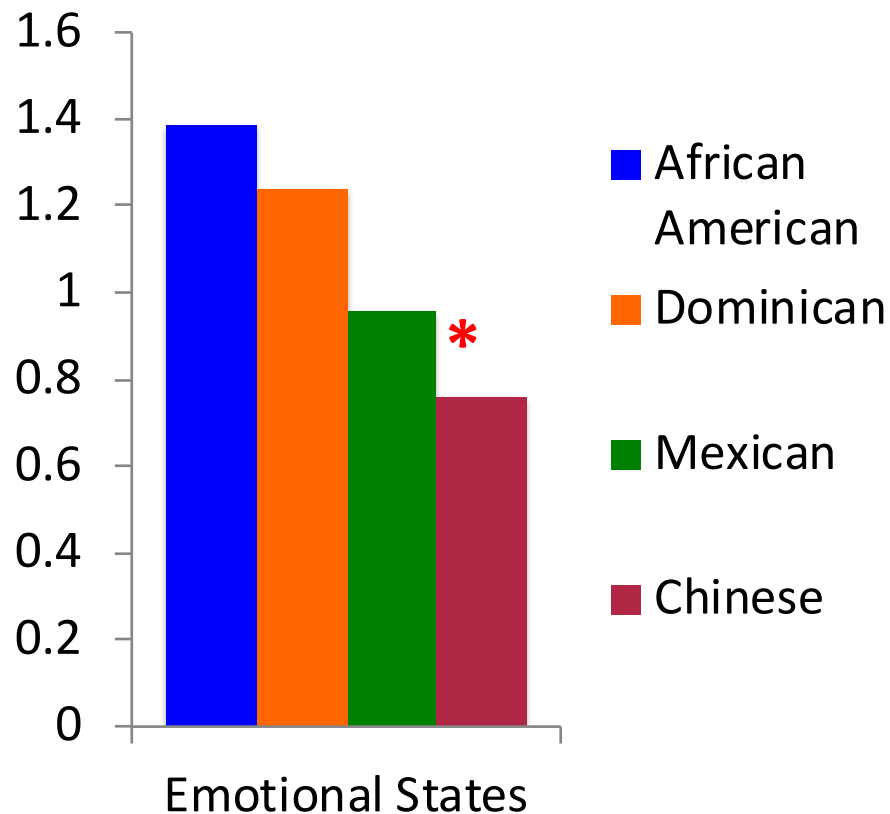
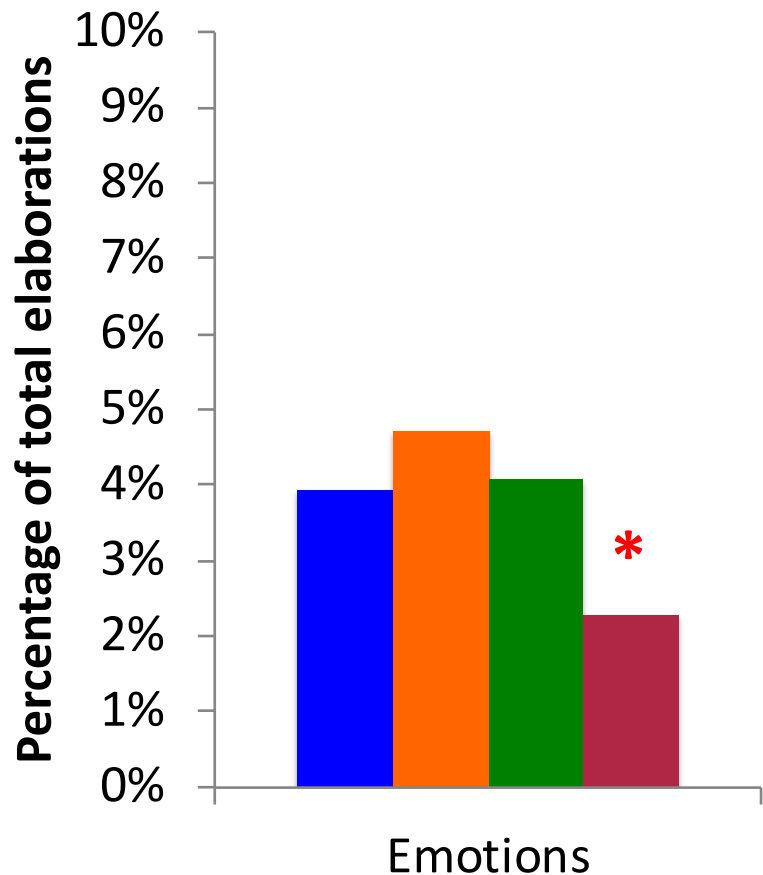
# Independent Storytelling Task at age 5



“Can you tell me a story?”

# Mother Book-Sharing Style at Age 4

# Child Storytelling Style At Age 5





# Study Set 2: Preschool

Socializing academic skills through play

# Block Play at age 4 Years

- Blocks contained graphics on each side that enabled teaching of: (1) literacy; (2) math; (3) construction; (4) body parts/colors



# Mothers' Teaching During Block Play at age 4 Years

- Coding of mothers' spontaneous use of gestures and language to teach concepts:
  - # intervals mothers taught each **concept** at
  - **Basic levels** (“This is letter A”; This is “1”) and **advanced levels** (“D O G spells dog”;  $1 + 1 = 2$ )

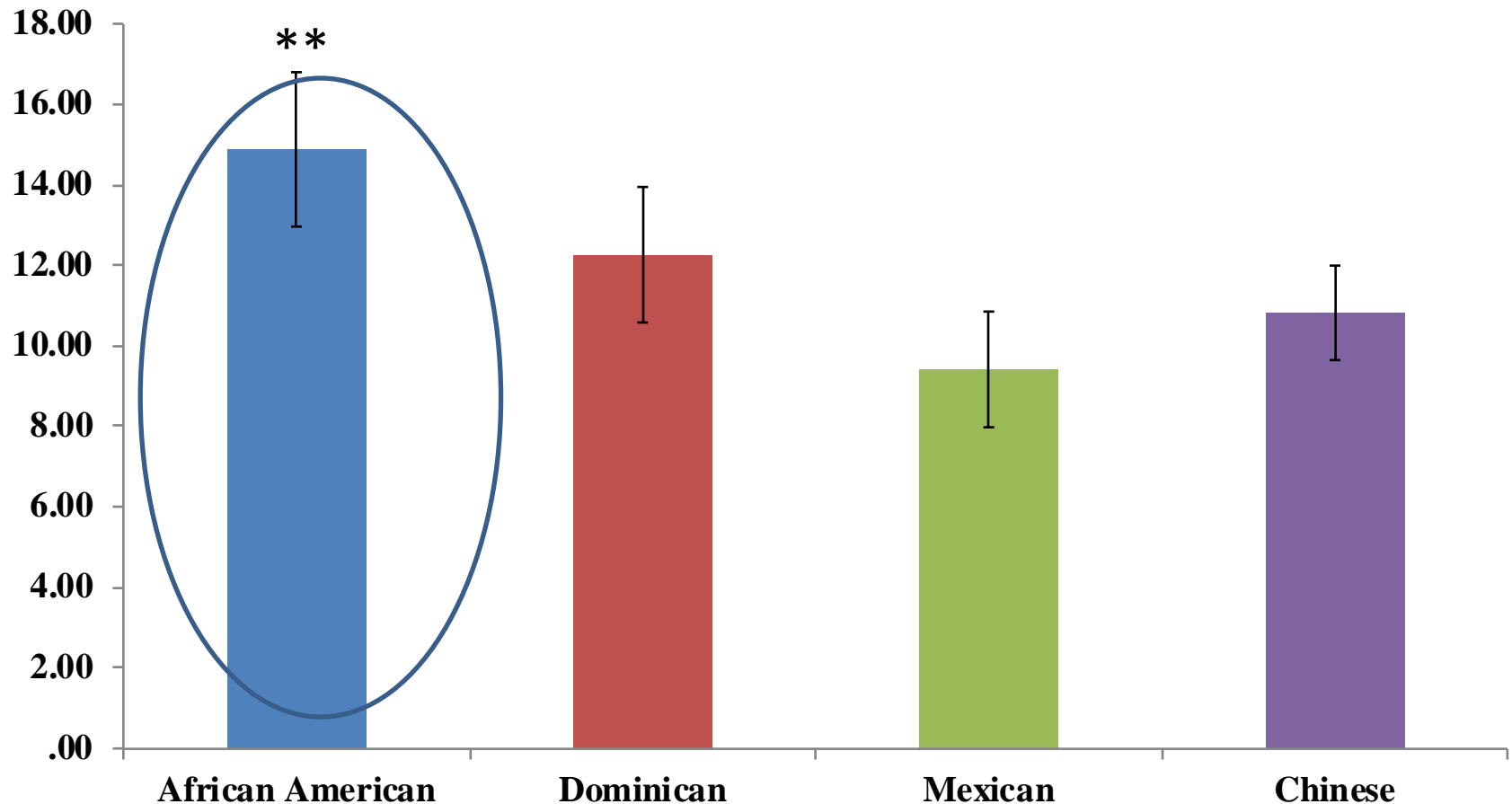
# 4 & 5 Year Child Measures

- *Early One Word Picture Vocabulary Test (EOWPVT)*: Productive vocabulary at 4 years
- *WPPSI Block Design*: Spatial math skill
- *Block-building Skills*: Model replication
- *Woodcock Johnson Subtests*
  - Applied Problems & Quantitative Reasoning (math)
  - Letter Word Identification (language/literacy)
  - Passage Comprehension (receptive language)

## Findings: Mothers' teaching

Mothers from different cultural communities used the blocks to teach different concepts

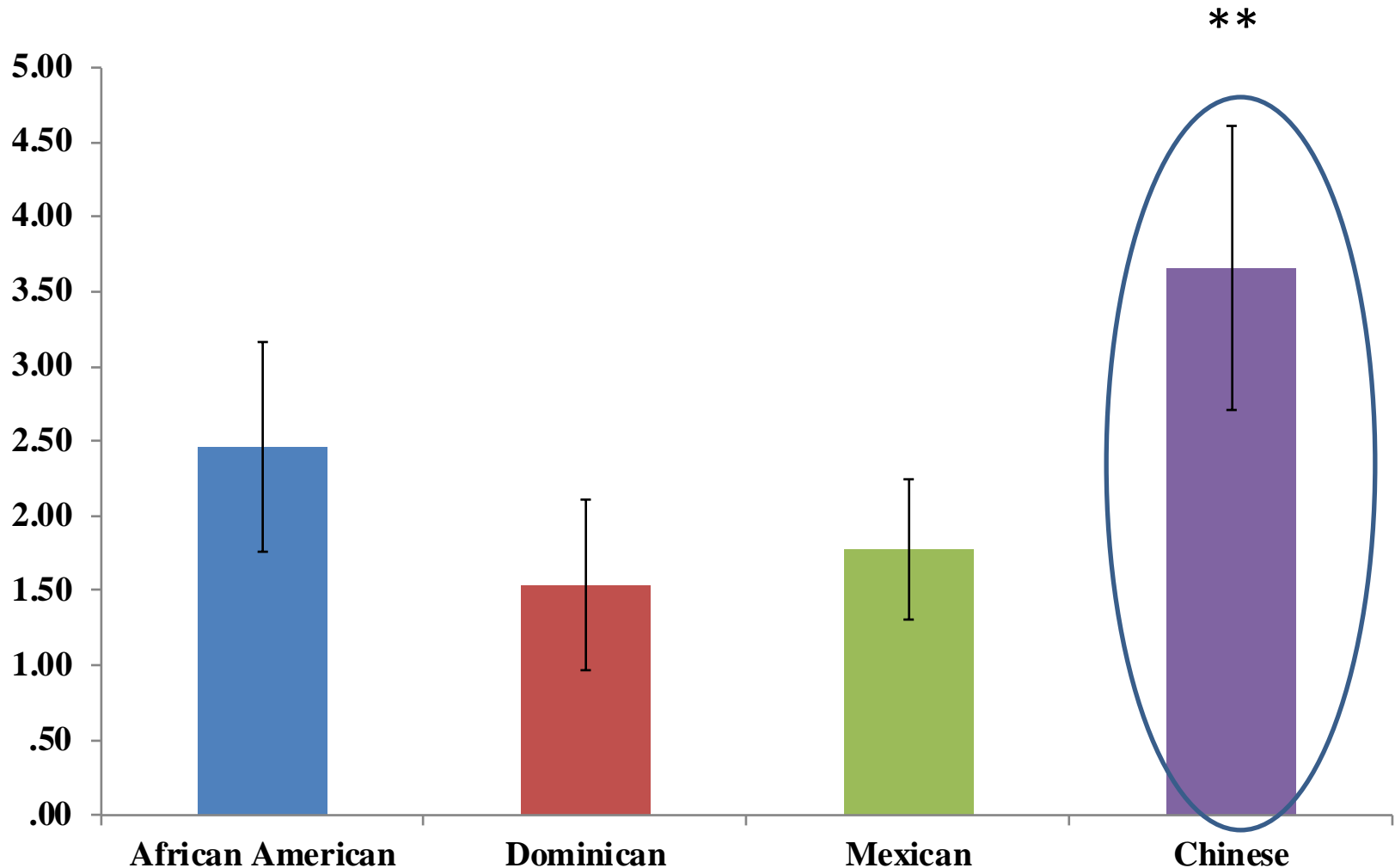
# Mothers' Teaching of Advanced Literacy Concepts



# African American Mother Teaching Advanced Literacy

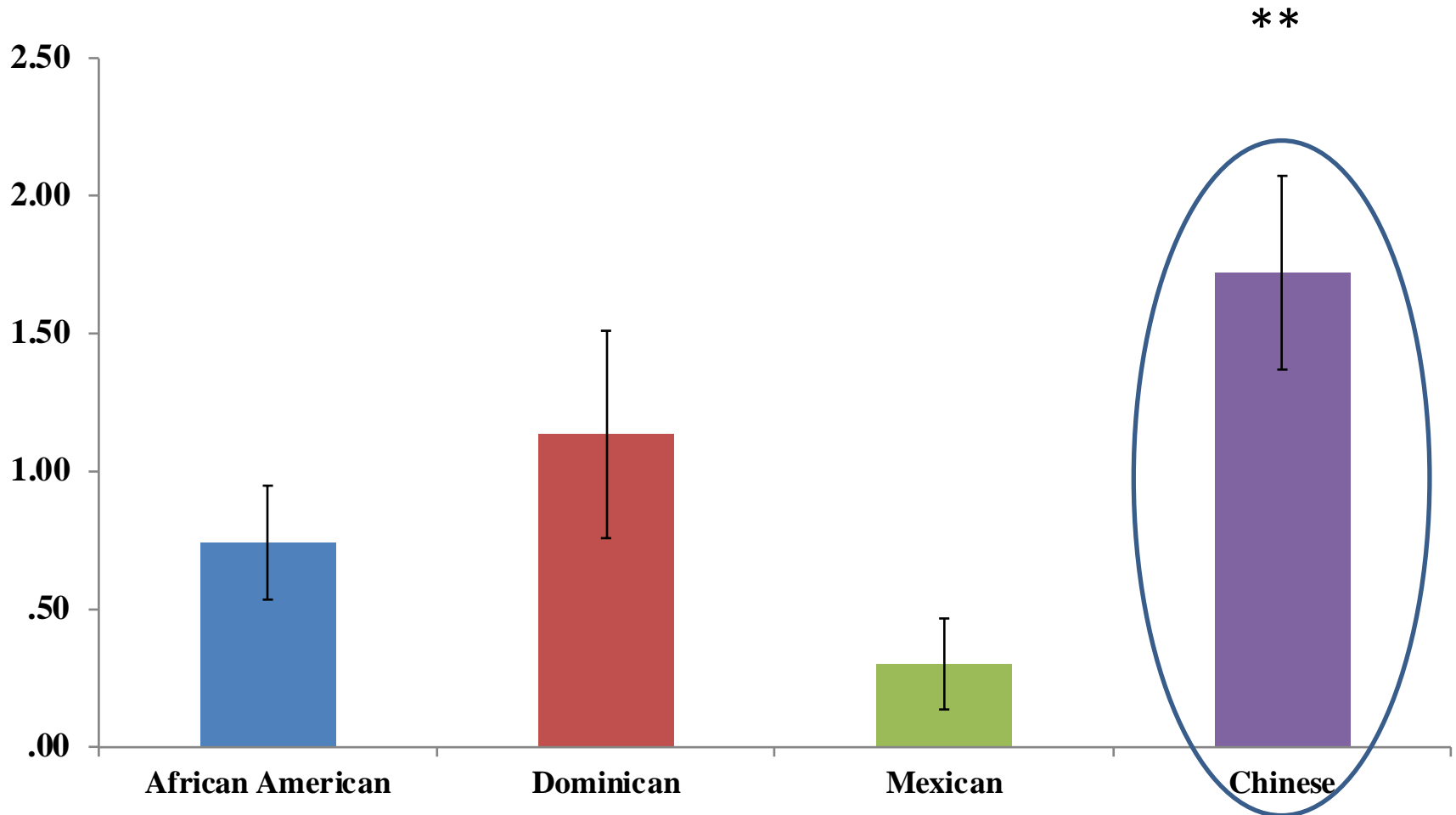
4 Year Block Play

# Mothers' Teaching of Advanced Constructive Play





# Mothers' Teaching of Advanced Math



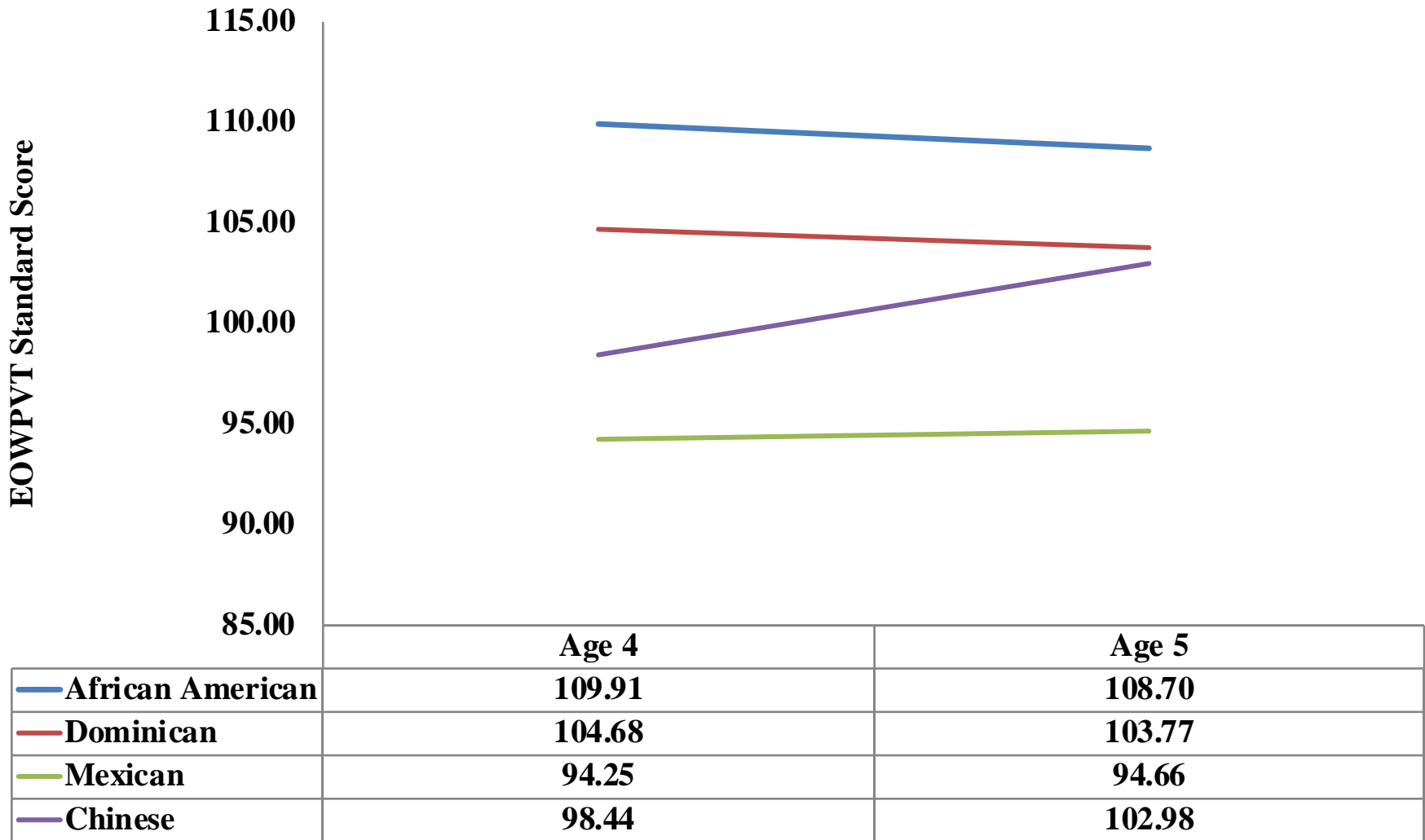
# Chinese Mother Teaching Advanced Math

# Findings: Children's pre-academic skills

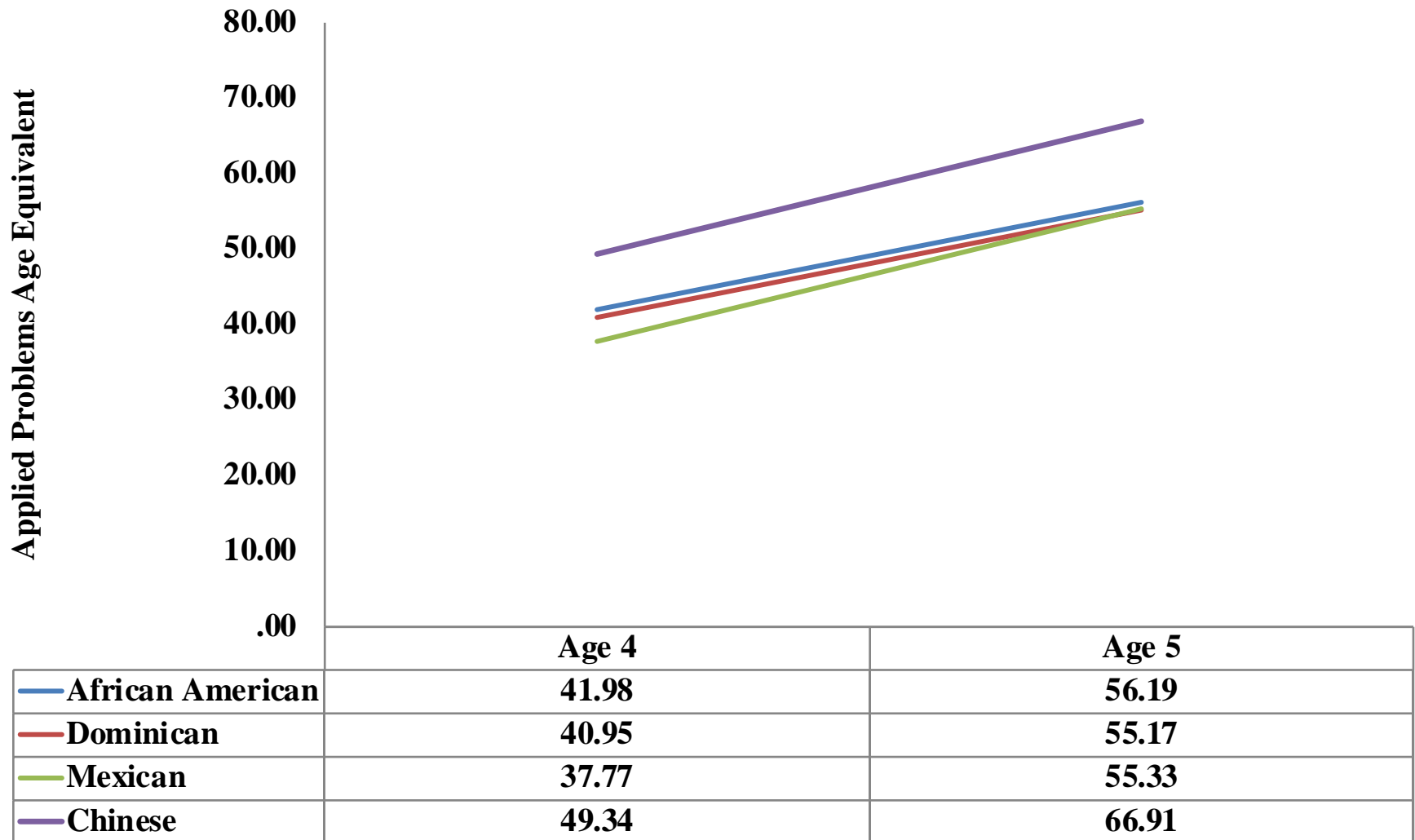
Cultural differences in mothers' teaching mapped to children's skills in language/literacy and math

# Children's Skills at 4 and 5 Years

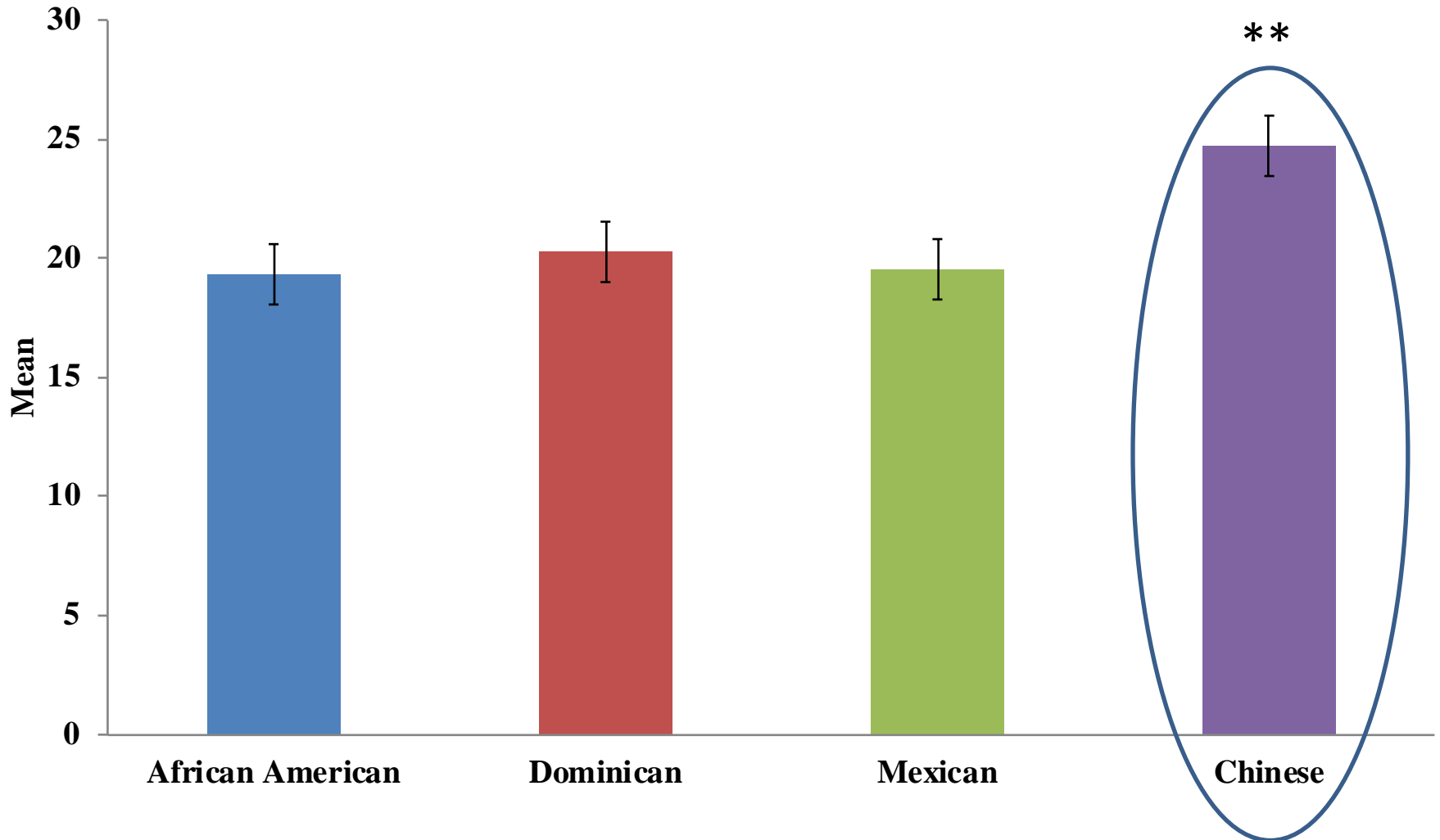
# EOWPVT Developmental Trajectory



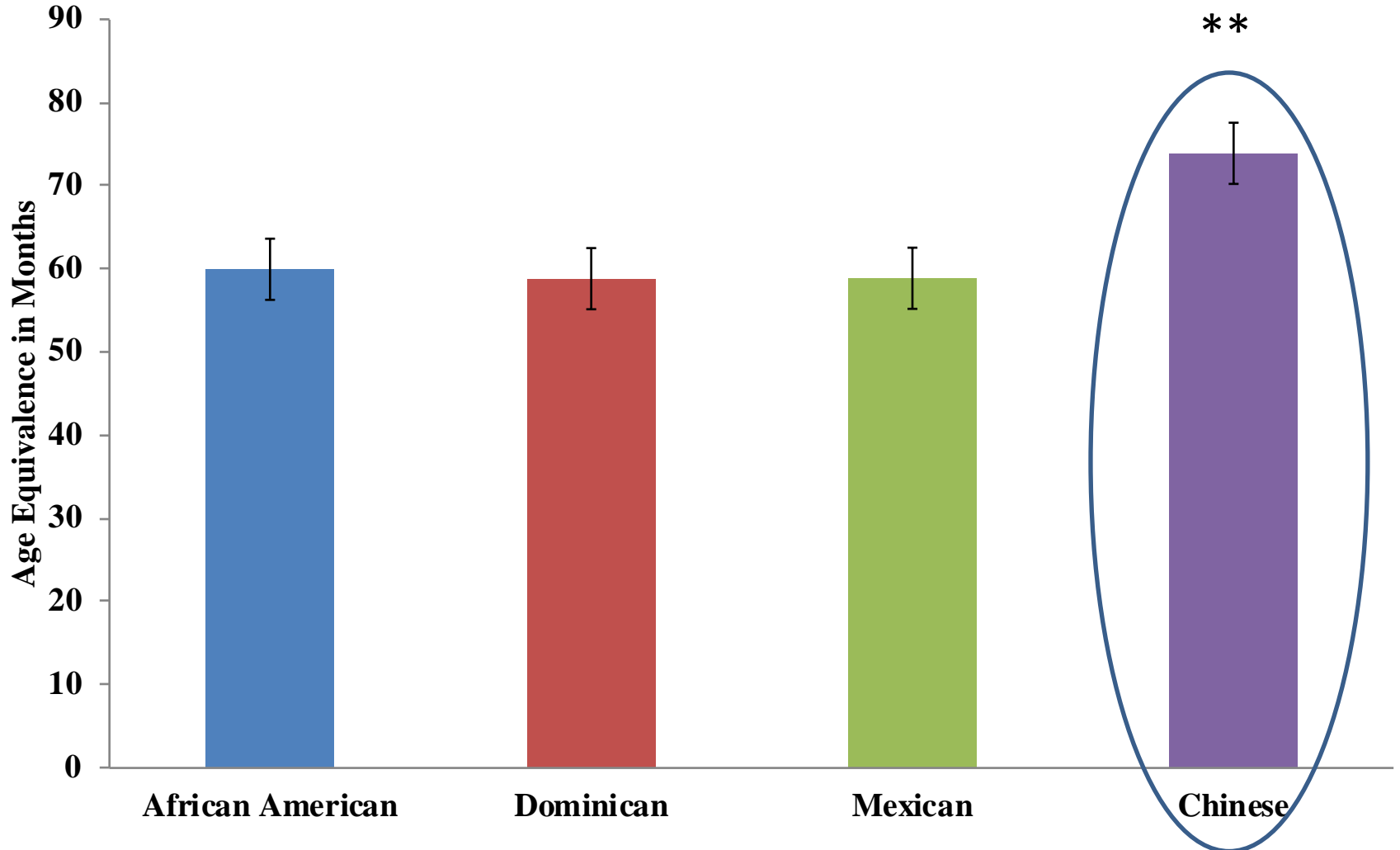
# Applied Problems Developmental Trajectory



# Children's WPPSI Block Design 5 years

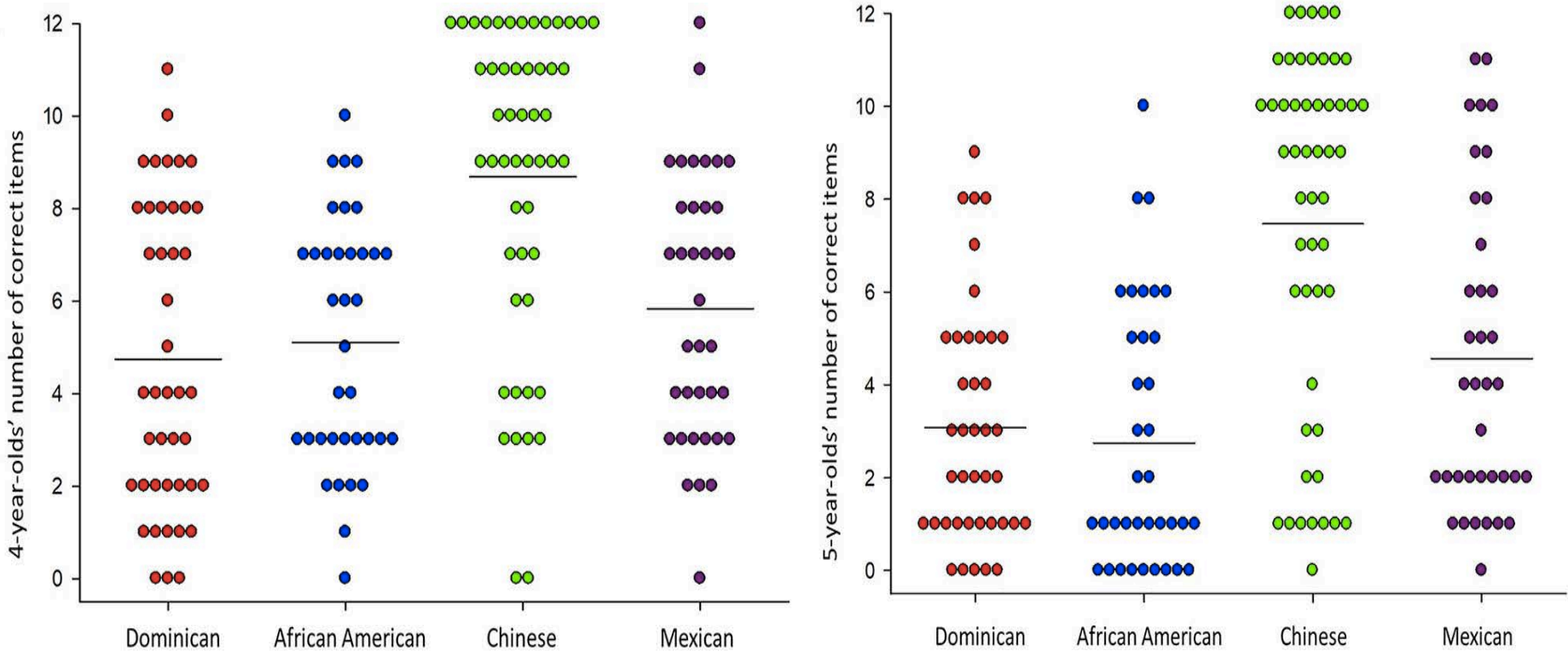


# Children's Woodcock Johnson Quantitative Skills 5 years





# Children's Success at Block Building



Suh, Liang, Ng, & Tamis-LeMonda (2019). *Front in Dev Psych*

## Study 3: 1<sup>st</sup> Grade

Socializing academic expectations  
through stories

# Parental Socialization around School Grades

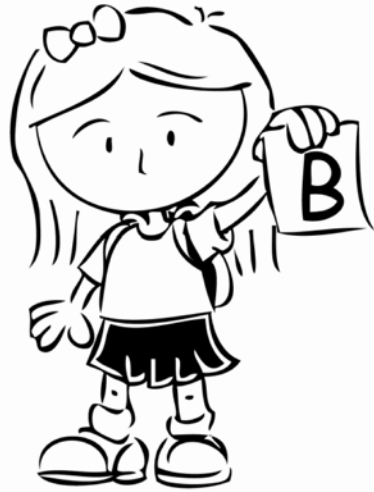
How do parents of different ethnicities socialize their children about school grades?

- What counts as a good grade?
- What causes a grade and what should follow?

# Methods

- Immigrant Chinese and African American mothers and their 1<sup>st</sup> graders
- Storytelling with four pictures
  - “B” grade as ambiguous





# Procedure

The four pictures were presented to mothers

*“Here are four pictures of a child. We would like you to tell your child a story using these pictures. There is no correct order and you can tell the story in any way you like. I’ll be back in about 5 minutes.”*

# Hypotheses

Basis in socialization goals and role of parent  
(recall the different cultural foci):

- Chinese focus on *self improvement*
- African American focus on *self enhancement*



# Hypotheses

These cultural emphases will result in Chinese (vs. African American) mothers:

- Evaluating the B grade more negatively
- Emphasizing lack of effort as cause of B grade
- Asking for more effort after the B grade (vs. African American mothers praising and rewarding children)
- Explicitly offering lessons about school grades

# Codes: Evaluation of a B grade

- Positive

“B is good”; “She gets a B, and her mommy was so happy about that!”

- Fair

“B is so-so”; “He got a B, a B is okay, right?”

- Negative

“B is bad”; “She looked like she was sad because she received a B only.”

# Codes: Cause of a B grade

- Exertion of Effort

“He studied for his test, and worked very hard on his test, so he got a B.”

- Lack of Effort

“Do you know why she got a B? Because she didn’t study and practice, and played too much.”

# Codes: Implications of a B grade

- Reparation

“Because he got a B only, the grade is not good enough, so he had to study harder.”

- Reward

“He got a B for doing his good test and mommy rewarded him an ice-cream cone.”

# Codes: Opportunity Education

- Direct Reference (to causes of grades)
  - “This little boy, just like you, he studied very hard on his test and he got a good grade.”
  - “This is you, Lidia. You are working hard, right? But you get a B only because you play and eat all day.”
- Didactic Coda (ending lessons)
  - “So you need to study hard and get an A, okay?”

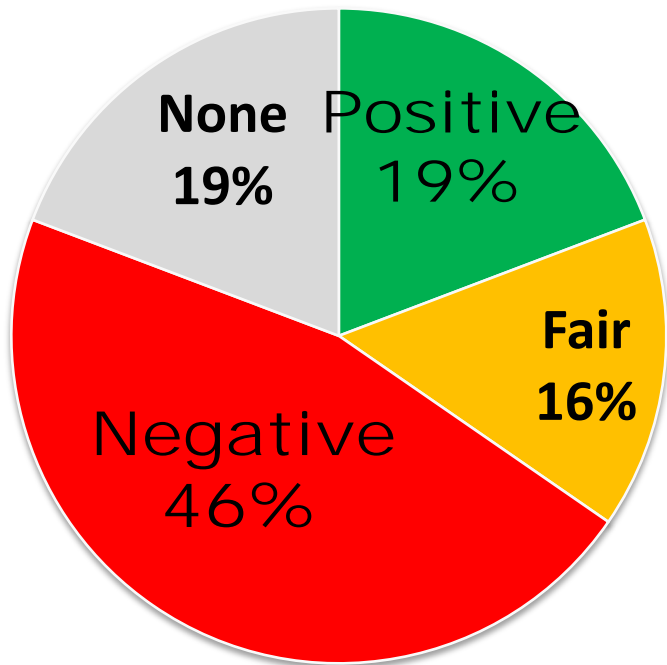
# Findings: Mothers' messages around academic performance

Mothers from the two cultural communities to different stories and showed different evaluations of the “B”

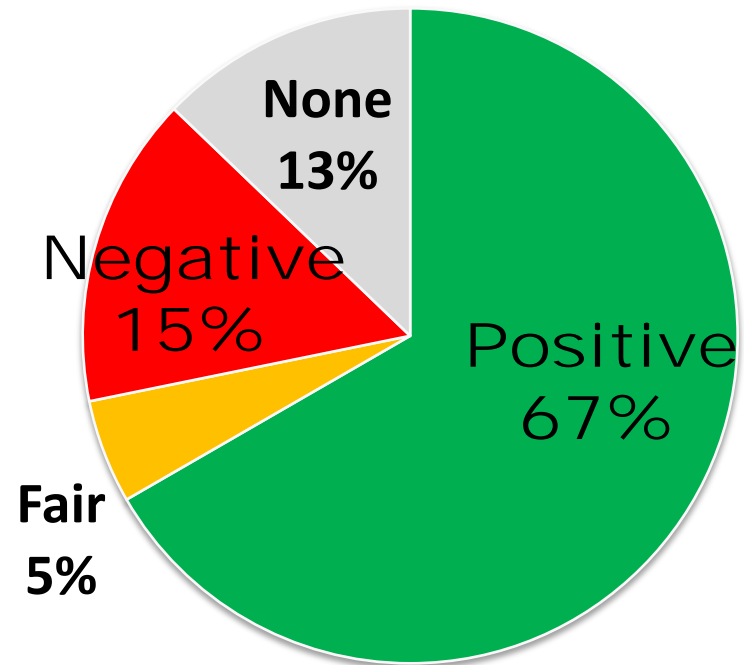
# Evaluation of a B grade

106

## Chinese

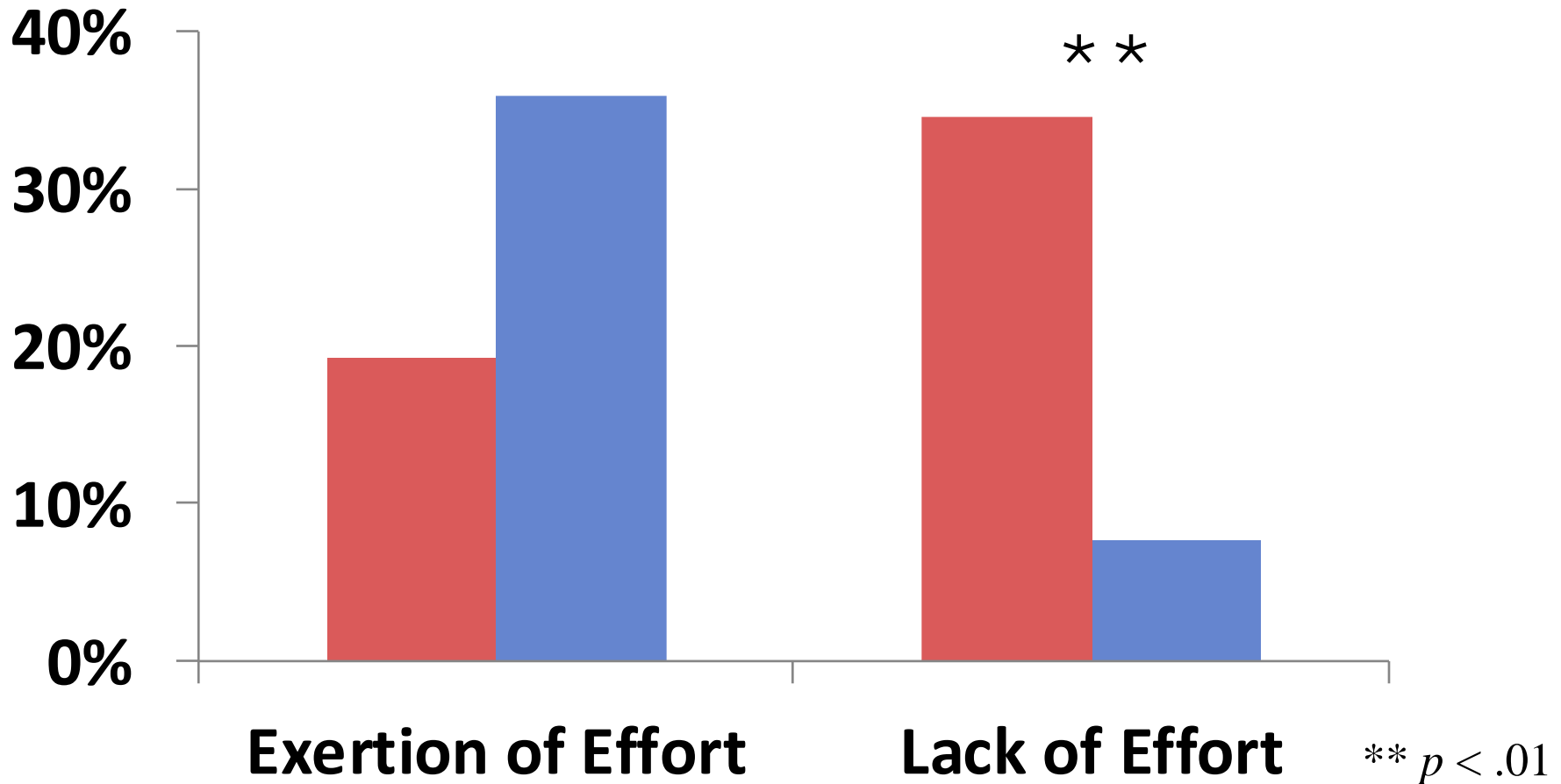


## African American



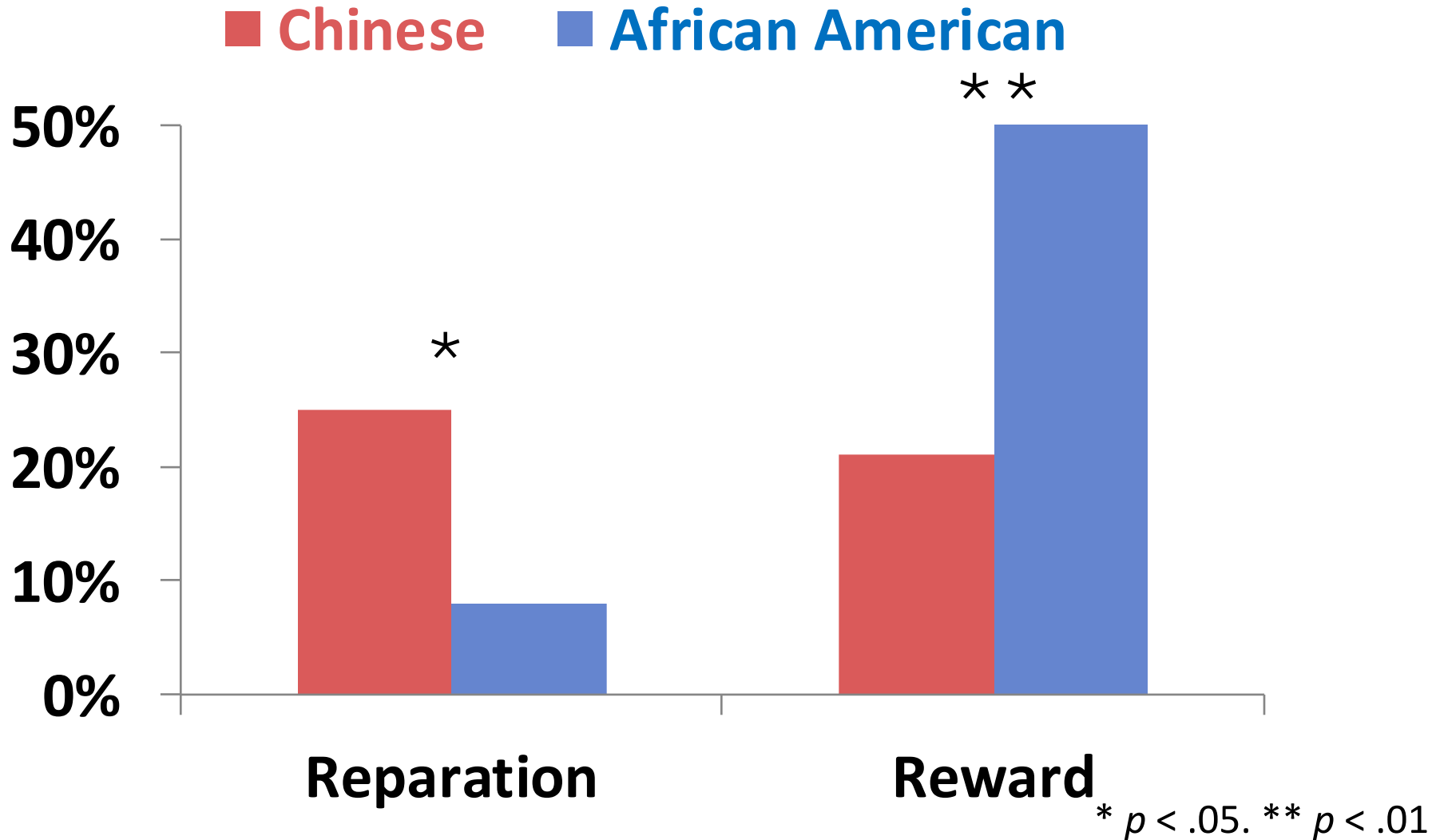
# Cause of a B grade

■ Chinese    ■ African American



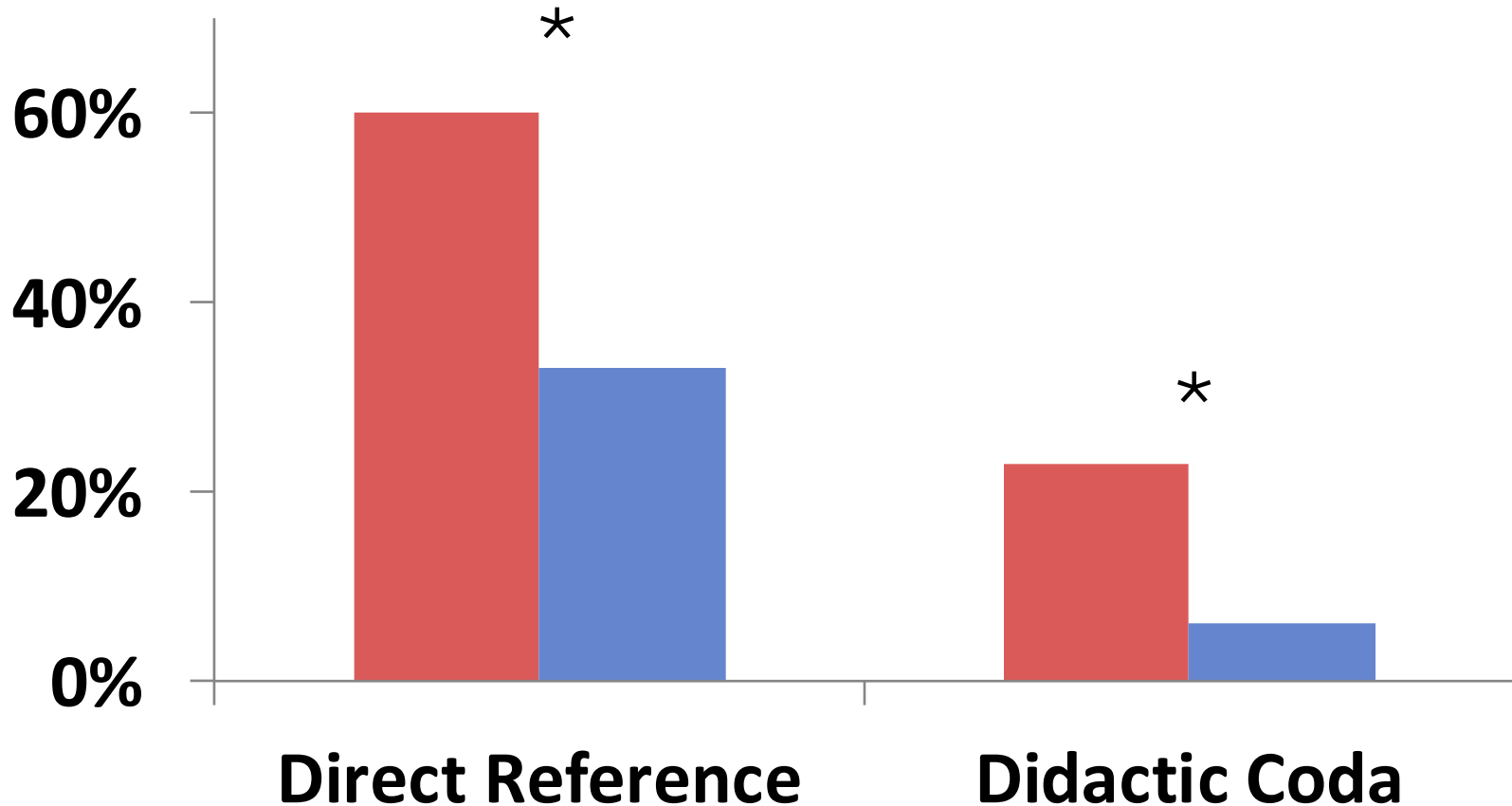


# Implications of a B grade



# Opportunity Education

■ Chinese    ■ African American



\*  $p < .05$

# Summary

- Culture infuses communication in infancy & toddlerhood:
  - Latine emphasis on regulatory language; African American emphasis on referential language
  - Mexican emphasis on gestures as a mode of communication
  - Regulatory language and gesture use in Mexican dyads may be behavioral manifestations of respeto
  - Respeto supports toddler language

# Summary

- Culture infuses communication in preschool:
  - African American emphasis on individual goals
  - Latine emphasis on emotions
  - Chinese emphasis on norms/morals & negative consequences
  - African American emphasis on literacy; Chinese emphasis on teaching math

# Summary

- Culture infuses communication in 1<sup>st</sup> grade:
  - African American emphasis on self enhancement (B is a good grade and deserves a reward)
  - Chinese emphasis on self improvement (B is a poor grade and requires reparation)

# Conceptual Take Aways

- Culture infuses communication
  - Through the “hows”, “whats”, and “whys” of communicative exchanges
  - Cultural messages are embedded in interactions at all ages, in all contexts
- Cultural practices play out in children’s emerging skills

# Methodological Take Aways

- As researchers, we can creatively harness even identical materials & setups to examine how caregivers convey cultural values
- “Micro-analysis” of the forms and content of gestures and language offer a valuable window into “*the culture of communication*”

# Thank you!

- National Science Foundation
- NICHD
- William T. Grant Foundation
- Administration for Children and Families
- Robinhood Foundation
- LEGO Foundation





# Special Thanks to...

- Participants in our studies
- Our research team for thousands of hours of coding