How Parents Socialize Their Children's Mathematics and Literacy Learning



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Overview

- Background Information
- What We Know:
 - Home vs. School
 - Literacy vs. Mathematics
 - Demographic Group-Based Differences
 - Examples of Relevant Factors to Consider
- Preliminary Findings from Ongoing Study
- What Do We Need to Know to Improve Children's Educational Outcomes?



Background: My Interests



- Improve educational outcomes of children from different demographic groups in Mathematics and Literacy
 - Raise the bar/close the gap

Background: Relevant Theories

Bronfenbrenner's bioecological model

• Vygotsky's sociocultural theory

• Byrnes and Miller opportunity-propensity theory

What We Know: Relevant Prior Research

- Reading vs. Math
- Demographic Differences
 in Outcomes
 - Minoritized vs. White Children
 - Low vs. non-Low Income
 - Boys vs. Girls



Sources of Differences Between Groups

- Quality of Schools
- Parents' Attitudes, Goals, and Beliefs
- Children's Engagement in Activities
- Societal Influences

Present Study

- Similarities in how parents in traditional vs. modern societies socialize their children's reading and mathematics skills?
- Parents of children ages 5-10 years
 U.S., Turkey, Pakistan, Kosovo, (Korea)

Sample

- US:
 - ~400 individuals, almost all mothers of children 4-10 years of age (most 5-9)
 - Mean Age: 40 years
 - Majority White
 - ~90% had at least BA/BS degree
 - ~83% annual household income > \$100,000

Measure

- Qualtrics online survey; social media sites
- Importance of assisting child
- Confidence in assisting child
- Attitudes about parent's skills
- Home activities
- Academic Expectations
- Importance of children's achievement
 - Adapted from LLAMA-LeFevre



Preliminary Findings

- Reading vs. Mathematics
 - Parents' Attitudes:
 - Reading *M* 4.49 vs. Math *M* 3.23, *p*<.001, *d* 1.05
 - Home Activities:
 - Reading *M* 3.10 vs. Math *M* 2.99, *p*<.001, *d*. 53
 - Achieving Benchmarks:
 - Reading M 4.46 vs. Math M 3.86, p<.001. d. 48

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Preliminary Findings

- Importance of Assisting Child
 Reading M 4.25 vs. Math M 3.92, p<.001, d.68
- Confidence Assisting Child
 Reading M 4.43 vs. Math M 3.89, p<.001, d 1.13
- Importance of Academic Achievement

 Reading M 4.65 vs. Math M 4.39, p<.001, d.62



Preliminary Findings

- Boys vs. Girls
 - Home math activities greater for boys than girls

- Boys play video games more than girls
- Mothers help more than fathers with homework, but fathers help more with math than reading58

Research Questions

- Why is math viewed less favorably than literacy (in US)?
- Is this true in all societies?
- What can we do to improve attitudes (and competencies) in math?





Research Questions

• How can we improve math skills for children from different demographic groups?

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Contact Information

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AND DEVELOPMENT LAB

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