Salvadori Update

Cognitive Development Lab
Conceptual Development and Social Cognition Lab
@ New York University
Background

- The Salvadori Center “uses the built environment to illustrate the relevance of math and science”

- Salvadori programs boost confidence, motivation, and content knowledge in math and science

Finding Relevance in Math and Science

- Utility Value (UV) is the perception that a topic is useful and relevant in your everyday life (not just in the classroom)

- Encouraging students to find relevance (UV) in subjects enhances their interest and performance
Research Question

- What makes Salvadori’s programs so effective?

Hypotheses

- Salvadori programs help children see how math and science are useful and relevant to their everyday lives
- Children’s perceptions of relevance (UV) increase over their participation in Salvadori
- These perceptions persist after their participation
Results Overview

- Relevance (UV) evaluated before, during, and after participation in a Salvadori program

- Academic Year = 40 weeks
  - Before participation: Weeks 0-20
  - During participation: Weeks 20-28
  - After participation: Weeks 28-40

Sample

- 387 children, kindergarten through 5th grade
- 194 girls, 193 boys
- Ages 4.26–11.28 ($M = 7.38$, $SD = 1.85$)
Perceived Relevance Before Salvadori

Weeks in the Academic Year

Perceived Relevance of Math & Science

Without Salvadori Participation

Weeks in the Academic Year
Perceived Relevance During Salvadori Participation

Weeks in the Academic Year

Perceived Relevance of Math & Science

Without Salvadori Participation

With Salvadori Participation
Perceived Relevance After Salvadori

Perceived Relevance of Math & Science

Weeks in the Academic Year

Without Salvadori Participation

With Salvadori Participation
By Gender: During Salvadori

**Perceived Relevance of Math & Science**

**Girls**

**Boys**

*Weeks in the Academic Year*
Relevance and Interest

Interest in Math & Science

Perceived Utility Value in Math & Science
By Gender: UV and interest

Interest in Math & Science

Perceived Utility Value in Math & Science

Girls

Interest in Math & Science

Perceived Utility Value in Math & Science

Boys
Conclusion

- Children’s perceptions of utility value in math and science typically decline throughout the school year.

- Salvadori programs boost children’s utility value throughout their participation in the program.

- This boost persists at least 12 weeks after participation.

- Greater utility value is associated with more interest in math and science.