Peer Acceptance and Motivation as Mediators of the Relationships between Students’ Social and Academic Competencies

Shawn L. Carlson
North Dakota State University
Constructs

- Academic competence
- Social skills
- Peer acceptance
- Academic motivation

Theoretical Framework:
- Self-Determination Theory (Deci & Ryan, 1985; Ryan & Deci, 2017)
- Social Cognitive Theory (Bandura, 2001; 1977)
Research Questions

(1) Controlling for sex and SES, does peer acceptance in the classroom and academic motivation mediate the relationships between children’s social skills and their math and reading competencies across time?

(2) Controlling for sex and SES, does motivation mediate the relationship between peer acceptance and math and reading competencies?
Recruitment & Participants

- Data come from Early Risers preventive intervention program study
  - 5 public elementary schools- 2 controls and 3 randomly assigned
  - 142 children participated in the current study
    - Ages 5-7
    - 93.7% White, majority middle class
Measures

- **Academic Competence Evaluation Scale-Teacher Form (ACES; DiPerna & Elliott, 1999; 2000)**
  - “Please rate the student’s academic skills in comparison with the grade-level expectations at your school”

  - Social Skills subscale
Measures (cont.)

- Sociometric data was collected from participants and from their classmates to obtain a peer acceptance score
  - Liked most nominations minus liked least nominations
- ACES Teacher Form (DiPerna & Elliott, 1999; 2000)
  - Motivation subscale
Analyses

- 3 waves: Baseline data collections occurred in the spring; Time 1 and Time 2 occurred in the fall and spring, respectively, of the next academic year
- Longitudinal path analyses with Mplus
- Estimates of indirect effects and their standard errors were calculated using bootstrapping with 10,000 iterations
- Sex and SES were controlled
Results

Figure 1. Path Diagram with Math Competency as the Outcome. *p < .05

* *p < .05
Results (Cont.)

*Figure 2. Path Diagram with Reading Competency as the Outcome. *p < .05

*Note: 
- **Peer Acceptance (M₁)**
- **Social Skills (X)**
- **Motivation (M₂)**
- **Reading Competence (Y)**
- Covariates: Sex, SES

*p < .05
Discussion

- Peer acceptance and motivation as sequential mediators
- Study confirms the importance of social skills to academic achievement in the classroom, specifically for early elementary students
- Evidence from this study and others make it clear that not only should teachers focus on academics in the classroom, but also on social-emotional learning (SEL)
Future Directions and Implications

- Future Directions:
  - A more comprehensive longitudinal design is needed
  - Other mediators should be tested (e.g., academic self-concept)

- Implications:
  - Curriculum standards should incorporate more rigorous requirements for SEL
  - Tailor prevention intervention programs to specifically focus on ways to promote peer acceptance