Teacher Self-Efficacy for Teaching Students with Autism: Associations with Stress, Teacher Engagement, and Student Outcomes

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What is This Study About?

- Teacher self-efficacy refers to teachers’ beliefs about their capability to teach.
- This study focuses on teachers’ self-efficacy for teaching students with autism spectrum disorder (ASD).
- Positive associations between teacher self-efficacy and student and teacher outcomes have been established including links to student outcomes such as grades or GPA in general education (Zas & Knoemen, 2016).
- This study focused on student outcomes relevant to special education and those students who have an Individualized Education Program (IEP).

Guiding Question:

When a teacher believes she can effectively teach a student with ASD, does the student demonstrate better progress toward goals?

Purpose of Study

To explore self-efficacy specific to teaching students with ASD and to examine relationship between self-efficacy and teacher stress, teacher engagement, and student Individualized Education Program (IEP) outcomes.

Participants

N = 44 Special Education Teacher/Student Dyads

- Mean age of student = 5.7 years (SD = 1.5)
- Mean teaching experience = 11.3 years (SD = 8.2)

- Sample gathered from a randomized control trial of the intervention titled the Collaborative Model for Promoting Competence and Success for Students with ASD (COMPASS) where participants were randomly assigned to control or experimental conditions.

- Participants from one Southeast and one Midwest state

Measures

- Autism Self-Efficacy Scale for Teachers (ASSET)
  - 30 items (see samples below)
  - 43 items (Part B)
  - Mean scores on 4 subscales

- Index of Teaching Stress (ITS)
  - 6 items

- Teacher Engagement Rating Scale (TERS)
  - 6 items

- Psychometrically Equivalence Tested Goal Attainment Scaling (PET-GAS)
  - Goals derived from student IEP

Results

Pearson’s Correlations for Variables in the Study

- Teacher Self-Efficacy
- Teacher Stress
- Teacher Engagement

<table>
<thead>
<tr>
<th>Variable</th>
<th>Teacher Self-Efficacy</th>
<th>Teacher Stress</th>
<th>Teacher Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Stress</td>
<td>-.39**</td>
<td>-.29*</td>
<td></td>
</tr>
<tr>
<td>Teacher Engagement</td>
<td>.36**</td>
<td>.26*</td>
<td>.38**</td>
</tr>
<tr>
<td>Student Outcomes</td>
<td>.39**</td>
<td>.26*</td>
<td>.38**</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01 for all analyses

Discussion and Future Directions

- The omnibus F-test using final scores indicated there was no difference between groups (control or intervention) at baseline [F (1, 42) = 1.57, p = .217, d = .035].
- The omnibus F-test using final scores indicated a statistically significant difference between groups following the intervention [F (1, 42) = 5.12, p = .029, d = .109].
- Mean teaching self-efficacy score at baseline
  - Control = 71.36 (SD = 13.73)
  - Intervention = 77.18 (SD = 9.74)
- Mean teaching self-efficacy score at final
  - Control = 77.05 (SD = 11.81)
  - Intervention = 84.68 (SD = 9.34)

- Teacher self-efficacy scores significantly correlated with scores from the engagement, student outcomes, and stress measures.

One-Way Analysis of Variance (ANOVA) of Self-Efficacy for Teaching Students With ASD by Group (Control or Intervention)

- Study includes measurement specificity: goal attainment is an idiographic measure to detect change in students with IEPs and the self-efficacy measure was specific to the population of teaching students with ASD.
- Although the intervention did not target teacher self-efficacy directly, it shows consultation can be successful in improving teacher beliefs.

- How can we improve self-efficacy for teaching students with ASD?
  - Can an intervention be designed?
- How much does a teacher’s knowledge of ASD affect her self-efficacy for teaching students with ASD?
- Can the ASSET be adapted to reflect beliefs of teachers as they work with students with other disabilities?

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Please visit p20motivationlab.org/research for a copy of the poster. For a full list of references, please contact Abigail Love, amlove2@uky.edu.