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 (Zee & Koomen, 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?

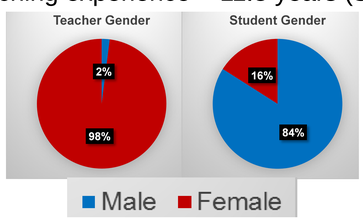
Purpose of Study

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.

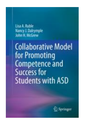
Participants

***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



COMPASS
balance at the center

Measures

Teacher Self-Report

Teaching Self-Efficacy
Autism Self-Efficacy Scale for Teachers (ASSET)
- 30 items (see samples below)

1 Not certain at all — 4 Very certain

Stress
Index of Teaching Stress (ITS)
- 43 items (Part B)
- Mean scores on 4 subscales

1 Never Distressing — 5 Very Distressing

Autism Self-Efficacy Scale for Teachers (ASSET)

Please rate how certain you are that you can do the things discussed with regard to **your student with autism spectrum disorder (ASD).** If you have more than one student, then provide a rating that reflects your overall certainty for doing the things discussed. Write the appropriate number in the space provided.

Rate your degree of confidence by recording a number between 1 and 4 using the scale given below:

1	2	3	4
Not certain at all	A little certain	Somewhat certain	Very certain

Remember to respond with your student in mind.

	Confidence (1-4)
1. Conduct an assessment of this student's developmental skills / learning skills	
2. Describe this student's characteristics that relate to ASD	
3. Describe the implications for intervention based on this student's characteristics of ASD	
4. Translate assessment information into teaching goals and objectives for this student	
5. Write a measurable objective for this student	

Independent Observer

Teacher Engagement
Teacher Engagement Rating Scale (TERS)
- 6 items

0 Does not attempt — 3 Maintained throughout

Blind Observer

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

-2 Present levels of performance — 0 Expected level — +2 Much more than expected

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Results

Pearson's Correlations for Variables in the Study

	Teaching Self-Efficacy	Teacher Stress	Teacher Engagement
Teacher Stress	-.39**		
Teacher Engagement	.36**	-.29*	
Student Outcomes	.39**	-.26*	.38**

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

- 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)

- 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)

Discussion and Future Directions

- 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 of other disabilities?

want to know more?

Please visit p2motivationlab.org/research for a copy of the poster. For a full list of references, please contact Abigail Love, amlove2@uky.edu.