Can I Teach Kids With Autism Spectrum Disorder? Investigating Teacher Self-Efficacy Within An Emerging Population of Students

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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).
- Teacher self-efficacy has been shown to affect motivation, stress levels, student achievement, job satisfaction, and amount of given effort.
- This study is grounded in Bandura’s (1986) social cognitive theory, which accentuates the importance of personal factors in influencing and being influenced by behaviors and environmental factors.

Guiding Question:

How can we measure a teacher’s beliefs for effectively teaching a student with ASD? Is this student-specific form of self-efficacy associated with a general form of self-efficacy?

Purpose of Study

To develop an instrument to measure teachers’ self-efficacy for teaching students with autism spectrum disorder (ASD).

The goal of this study was to demonstrate validity evidence based on (a) content, (b) response processes, (c) internal structure, and (d) relations to other variables.

Participants

**Phase 1: Item development**
- Experts in the field of ASD (n = 3)
- Experts in the field of self-efficacy (n = 3)
- Certified K-12 Teacher (n = 10)

**Phase 2: Instrument Validation**
- N = 134 K-12 teachers
  - Mean age = 37.81
  - 81% female
  - General education n = 105
  - Special education n = 29

Teacher Self-Efficacy for Autism Scale (TSEAS)

“Please rate how certain you are that you can do the following tasks with regard to one particular student with autism. While completing this activity, please have one current or past student with autism in mind when ranking each of the following statements. If you have not taught a student with autism, please consider how certain you are that you can accomplish the following tasks in the occasion that you might have a student with autism in your class.”

Not certain at all | A little certain | Somewhat certain | Very certain
--- | --- | --- | ---
1. Motivate this student when he or she shows low interest on a topic
2. Keep this student on task during difficult assignments
3. Resolve a disruptive behavior
4. Sustain a positive student-teacher relationship
5. Provide meaningful experiences
6. Make expectations clear about classroom behavior
7. Establish routines to keep activities running smoothly
8. Gauge student comprehension
9. Differentiate instruction when appropriate
10. Facilitate appropriate social interactions with peers
11. Manage transition times
12. Address student’s individual education plan (IEP) goals

Results: Latent Variable Correlations

<table>
<thead>
<tr>
<th>Latent Variable Correlations for Variables in the Study</th>
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<tbody>
<tr>
<td>Variable</td>
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<tr>
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<td></td>
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<tr>
<td>Teacher Sense of Efficacy Scale</td>
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<tr>
<td>Self-Regulation</td>
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<td>Job Satisfaction</td>
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</tbody>
</table>

Discussion

Internal Structure:
- Preliminary analyses demonstrated an EFA was appropriate, KMO = .85, Bartlett’s test of sphericity = 683.83, p < .001.
- All items loaded on the unidimensional solution confirming this instrument could be interpreted as one construct, self-efficacy for teaching students with ASD.

Latent Variable Correlations:
- Self-efficacy for teaching students with ASD was significantly correlated with scores from the general teacher sense of efficacy scale, the self-regulation scale, and the job satisfaction scale.

Results: Internal Structure

**Teacher Self-Efficacy for Autism Scale Factor Loadings for the Unidimensional Solution**

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Motivate</td>
<td>.76</td>
</tr>
<tr>
<td>2 On Task</td>
<td>.72</td>
</tr>
<tr>
<td>3 Behavior</td>
<td>.66</td>
</tr>
<tr>
<td>4 Relationship</td>
<td>.61</td>
</tr>
<tr>
<td>5 Consequences</td>
<td>.70</td>
</tr>
<tr>
<td>6 Expectations</td>
<td>.52</td>
</tr>
<tr>
<td>7 Routines</td>
<td>.60</td>
</tr>
<tr>
<td>8 Comprehension</td>
<td>.52</td>
</tr>
<tr>
<td>9 Differentiation</td>
<td>.44</td>
</tr>
<tr>
<td>10 Social</td>
<td>.73</td>
</tr>
<tr>
<td>11Transition</td>
<td>.65</td>
</tr>
<tr>
<td>12 IEP</td>
<td>.40</td>
</tr>
</tbody>
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Future Directions

This study provided preliminary evidence for four types of validity for a new scale. Further evidence is required on larger and more diverse samples. Following further validation, this scale can be used to answer questions such as:

- How can we improve self-efficacy for teaching students with ASD?
- Can an intervention be designed?
- How much does knowledge of ASD affect a teacher’s self-efficacy for teaching students with ASD?

For a full list of references, please contact Abigail Love, amlove2@uky.edu.

Note: The use of ASD throughout this poster refers to autism spectrum disorders.

IN 68 children are diagnosed with ASD every year
(Centers for Disease Control & Prevention, 2015)