

# The Effectiveness and Comparison of Tier 2 Intervention on Improving Social, Emotional, and Behavioral Outcomes in Elementary School

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## PURPOSE OF STUDY:

This dissertation research sought to provide a particular school district with a better understanding of effective Tier 2 interventions to address minor, but frequently occurring problematic behaviors occurring in the classroom. An additional intent was to add evidence to the literature by exploring differences in outcomes when pull-out and classroom-based interventions are used.

### BACKGROUND

- 1<sup>st</sup> grade teachers expressed frustration with minor, yet chronic behaviors interrupting student learning
- Behaviors reflected social-emotional learning (SEL) skill deficits identified in the literature (Correia & Marques-Pinto, 2016; Jones & Doolittle, 2017)
- Tier 2 interventions, such as pull-out small groups, have been successful in addressing SEL skill deficits (Simonsen & Myers, 2015; Green et al, 2019)
- Less commonly used Tier 2 classroom-based group contingency programs have also been effective in reducing behavior problems (Maggin et al, 2012)
- This research provides beneficial information to teachers as they make decisions regarding the use of classroom based strategies to impact social/emotional learning or reliance on pull-out interventions

### RESEARCH QUESTIONS

- What is the overall effectiveness of Tier 2 interventions in improving social, emotional, and behavioral outcomes for children identified as in need of behavioral intervention?
- How does a teacher-led, classroom-based intervention compare with a pull-out, small group intervention in improving social, emotional, and behavioral outcomes for behaviorally at-risk elementary school students?

### DESIGN

- Quasi-experimental; Participants identified through criterion sampling
- Interventions occurred simultaneously for 8 weeks
- Data was collected pre- and post-intervention

### MEASUREMENT

#### Independent Variables

- **Pull-out Groups:** *We Thinkers!* (Zweber-Palmer et al, 2016)
- **Classroom-based:** Class-wide Function Related Intervention Teams (CW-FIT; Kamps et al., 2016)

#### Dependent Variables

- Observational Data
- Off-task behavior
- Excessive social interaction during instruction

#### Outcome Variables

- **Social-emotional competency:** Social Skills Improvement System, Social Emotional Learning (SSIS-SEL; Graham & Elliot, 2017)
- **Behavioral Concerns:** Strengths and Difficulties Questionnaire (SDQ; Goodman, 2005)

### FINDINGS

#### RESEARCH QUESTION #1: OVERALL EFFECTIVENESS OF TIER 2 INTERVENTION IN IMPROVING SOCIAL, EMOTIONAL, AND BEHAVIORAL OUTCOMES

VARIABLE	PRE-INTERVENTION MEAN	POST-INTERVENTION MEAN	p-VALUE	EFFECT SIZE
SSIS-SEL Core Skills Subtest	73.33	77.83	.017	<b>.81</b>
SDQ Total Difficulties Score	18.45	17.33	.40	.27
Off-Task Behavior	14.33	12.00	.54	.18
Excessive Social Interaction	7.92	6.33	.47	.21

- Teacher reported scores indicated an increase in social-emotional competencies including self-awareness, self-management, social awareness, relationship skills, and responsible decision making.
- Results highlight the effectiveness of Tier 2 intervention in positively impacting social-emotional skills acquisition, however, results regarding actual behavior did not follow study expectations.

#### RESEARCH QUESTION #2: DIFFERENCES IN EFFECTIVENESS BETWEEN A PULL-OUT AND CLASSROOM-BASED INTERVENTION

VARIABLE	PRE-INTERVENTION MEAN**	POST-INTERVENTION MEAN**	P-VALUE	EFFECT SIZE
<i>We Thinkers!</i> : Pull-out Intervention	69.56	74.00	.05	<b>.76</b>
CW-FIT: Classroom-based Intervention	84.66	89.33	.29	<b>.82</b>

- Sample size:  
Pull-out Intervention: 9  
Classroom-based Intervention: 3
- The mean data scores were obtained by separating the pull-out intervention participants from the classroom-based intervention participants within the SSIS-SEL Core Skills subtest.
- Results indicated that the pull-out intervention was more effective in impacting social-emotional competencies relative to the classroom-based intervention.

### DISCUSSION

- Teacher perceptions of acquisition of social-emotional skills were positively impacted while performance (measured by direct observation and the SDQ) did not produce a statistically significant change.
- The development of social-emotional competencies may be differentiated by the “acquisition” (knowledge) and “performance” (behavior) of skills.
- It was hypothesized that classroom-based intervention would be more effective in creating change, however, results were contradictory to this hypothesis.
- Research points to the
  - explicit focus on social and emotional skills in the pull-out intervention, including teaching, practice, and leader feedback may have provided an opportunity for more effective learning
  - potential benefit of classroom-based programs which provide explicit social and emotional skill learning in addressing chronic Tier 2 behaviors teachers encounter throughout their day.

### LIMITATIONS

- Small sample size
- Lack of randomization due to design constraints
- Length of intervention

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