



# Community Implementation of TCIT: Benchmarking Against TCIT Research

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# Symposium Objectives

1. Describe a systematic review of TCIT research
2. Describe community implementation of TCIT
3. Compare outcomes of community implementation to TCIT research studies



# A Systematic Review of TCIT Research: What We Learned

BETH TROUTMAN & ALLISON MOMANY

# Introduction - TCIT

- ▶ Teacher-Child Interaction Training
  - ▶ An intervention that applies PCIT methods (i.e., in vivo coaching of CDI and PDI) to educators in early childhood classrooms.
  - ▶ Methods are modified from PCIT due to differences between home and classroom environments
- ▶ Models of TCIT
  - ▶ Universal vs. targeted-child focused

# Introduction – Effect Sizes

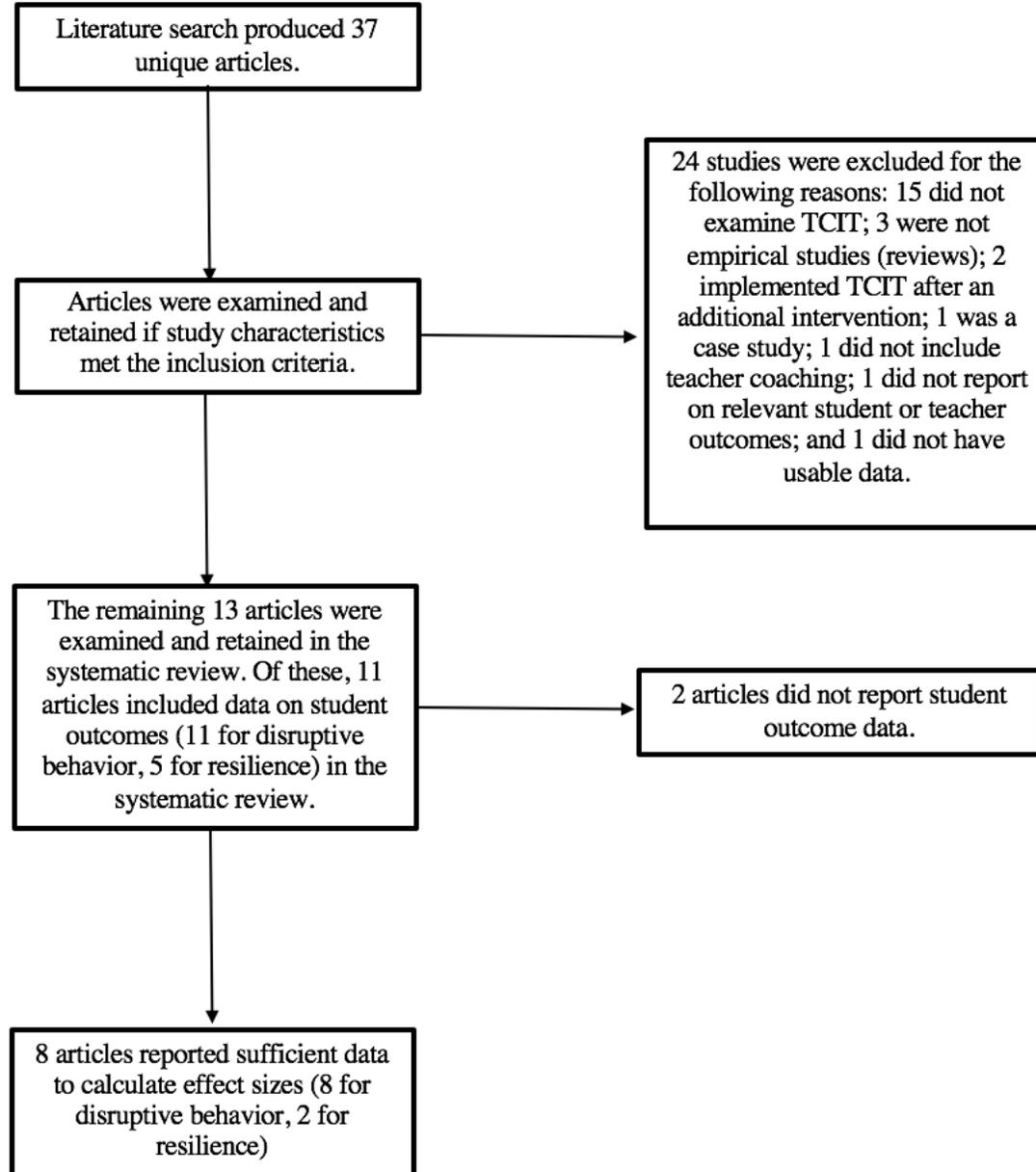
- ▶ Effect sizes
  - ▶ A method of describing outcomes that examines the *effect* of an intervention.
  - ▶ Effect sizes are numerical estimates and are generally categorized as trivial, ( $d < .2$ ), small ( $d = .2$  to  $.5$ ), medium ( $d = .5$  to  $.8$ ) or large ( $d > .8$ ).
  - ▶ Important to use effect sizes to evaluate interventions because this metric evaluates the *strength* of the intervention as opposed to the mere statistical significance.

# Methods – Literature Search

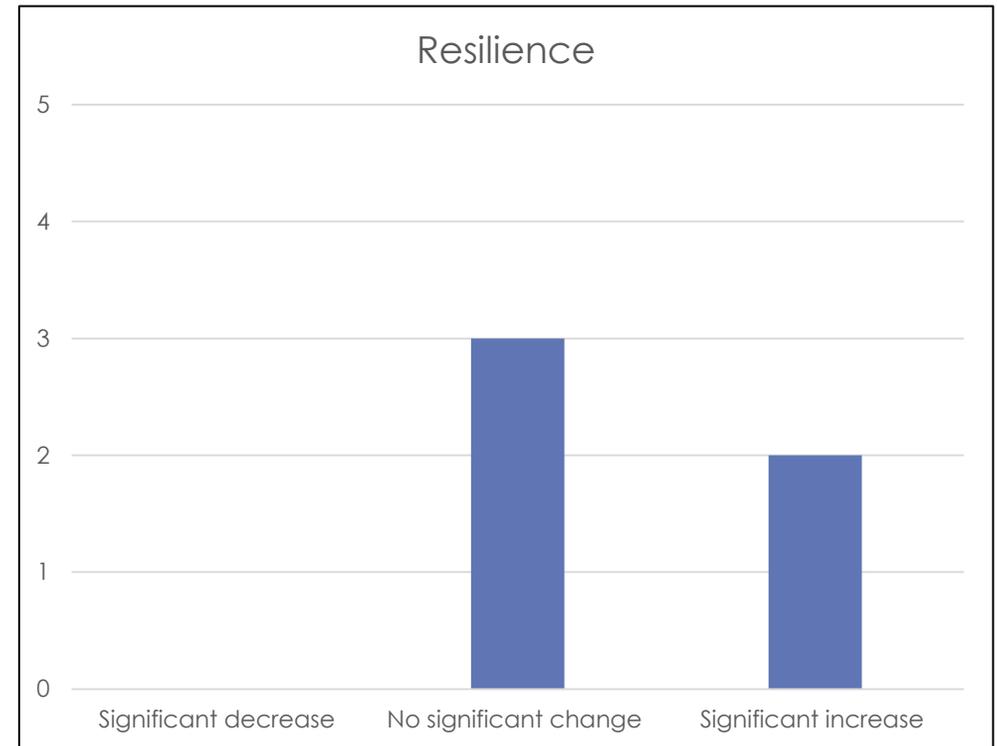
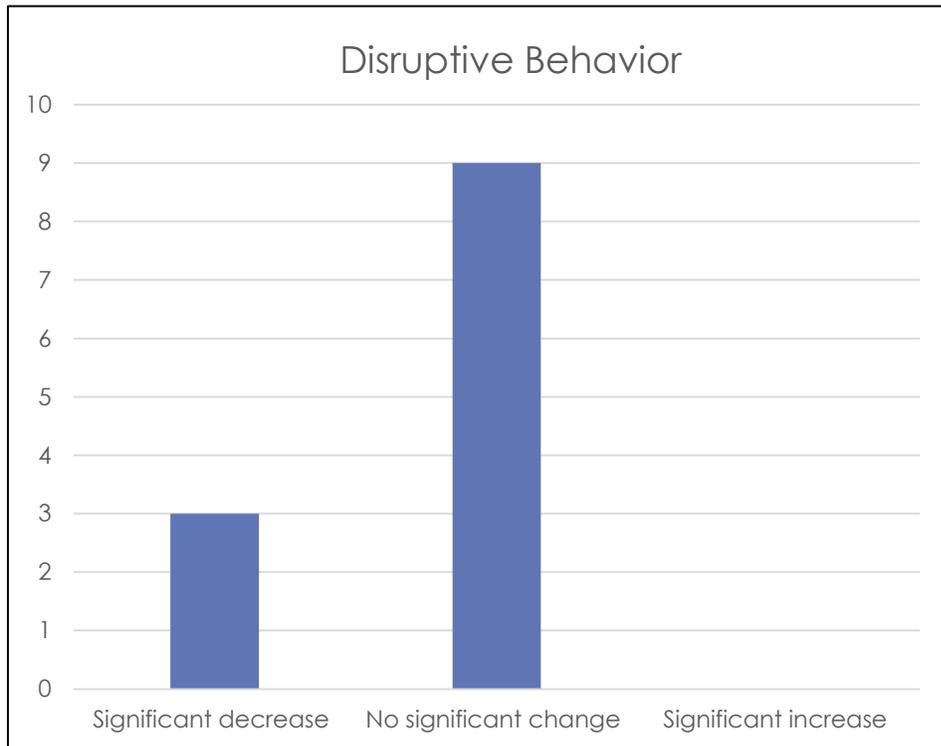
- ▶ Lit search in PyschInfo completed with search terms “Teacher Child Interaction Training”, “Teacher Child Interaction Therapy”, “PCIT” & “Teacher”, “TCIT”
- ▶ Inclusion criteria
  - ▶ Published articles or theses/dissertations
  - ▶ Teachers using TCIT or PCIT intervention in the classroom
  - ▶ Quantitative data on teacher or child outcomes
  - ▶ Either RCT or pre- and post-data available

# Methods – Data Extraction

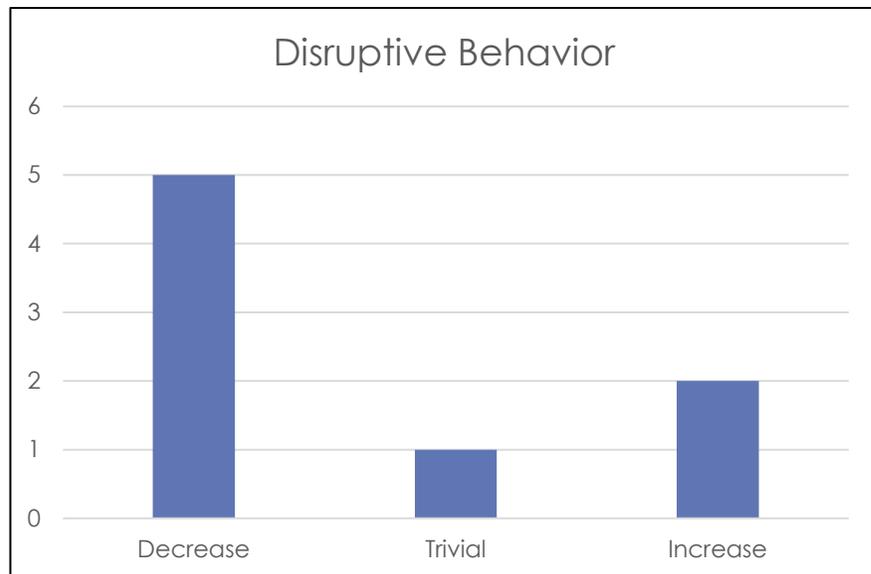
- ▶ Two individuals examined the articles and extracted data on student outcomes of interest
  - 1) Disruptive Behavior
  - 2) Resilience
- ▶ A third individual compared the data that was extracted from the articles by the two individuals.
- ▶ Data discrepancies were resolved by the third individual who examined relevant data in the article



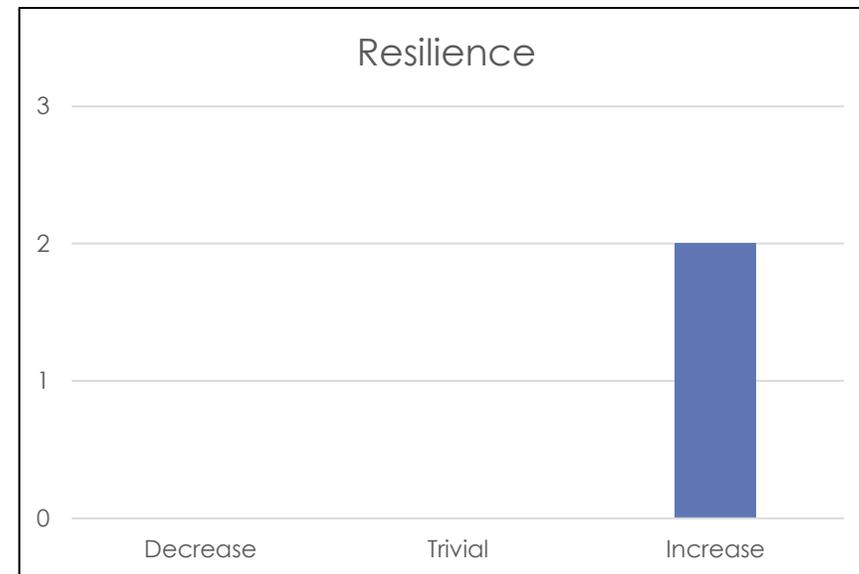
# Results – Statistical Significance



# Results – Effect Sizes



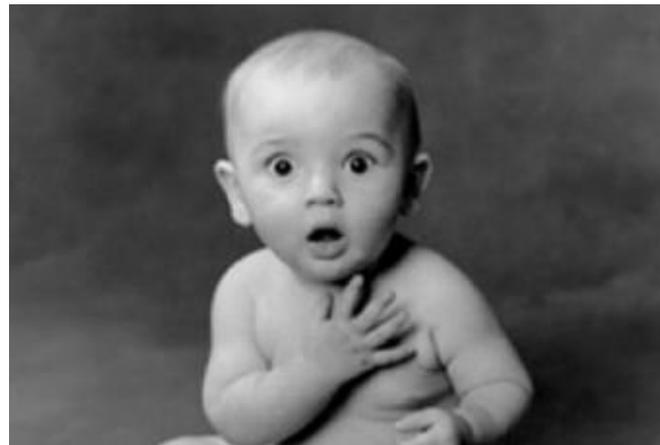
$d$ s for decrease = -4.84 to -0.30  
 $d$  for trivial = -0.15  
 $d$ s for increase = 0.33 to 0.94



$d$ s for increase 0.82 to .091

# What We Learned

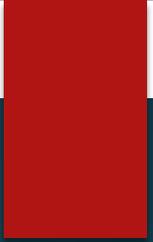
- ▶ TCIT models continue to evolve
- ▶ There is less research on TCIT than anticipated
- ▶ There are fewer significant findings than expected



# What We Learned

- ▶ The research on TCIT often does not include sufficient data to calculate an effect size
- ▶ Effect sizes varied greatly in magnitude and direction





# TEACHER CHILD INTERACTION TRAINING

KELLI SLAGLE – EARLY OPPORTUNITIES THERAPY SERVICES

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# How TCIT is similar to PCIT

- ▶ The “Do” CDI/PRIDE skills are the same in TCIT as they are in PCIT
- ▶ The “Don’t” skills are the same as PCIT
- ▶ Every coach session starts with 5 minutes of coding, just like PCIT
- ▶ Mastery of CDI skills is 10-10-10, just like PCIT
- ▶ The Eight Rules of Effective Command giving are the same as PCIT
- ▶ Active Ignore concept is the same
  - ▶ Follow the rules of ignore while actively looking for something positive to give attention to

# How TCIT is different than PCIT

- ▶ TCIT had NO one-way mirror or sterile controlled environment!
- ▶ In TCIT, there is a “proficiency” level of mastery of the CDI/PRIDE skills
  - ▶ 7-10 of the PRIDE skills is considered proficiency
  - ▶ This is tracked to determine whether booster sessions the following semester need to be conducted
- ▶ The Sutter-Eyberg Student Behavior Inventory revised version (SESBI-R) is utilized to track progress for dangerous and destructive behaviors in the classroom, equivalent to the ECBI in PCIT
- ▶ The DECA/DESSA assessment tool is also utilized in TCIT
  - ▶ This is used to measure the social-emotional growth of the children receiving TCIT treatment

# How is TCIT different than PCIT (cont'd)

- ▶ Ineffective commands are coded differently in TCIT than they are in PCIT
  - ▶ Based on the situation of how the IC was delivered. There is instruction delivered about future tense expectation in the classroom that is coded as neutral talk because there is no opportunity for the child to comply based on the fact that the child cannot complete it until the future.
  - ▶ Ex: “you will glue your sticks together in art.”
- ▶ The second phase of treatment in TCIT is called TDI instead of PDI
- ▶ The earbuds are different in TCIT than PCIT
  - ▶ Need stronger earbuds to hear over 20+ children
  - ▶ Need a two way transmitter to be able to hear teachers in noisy rooms or for really quiet talking

# How is TCIT different than PCIT (cont'd)

- ▶ Mastery of TDI skills is different in TCIT than PCIT
  - ▶ Teachers get credit for a “follow up” in TCIT when they follow ANY Don't skill up with ANY Do skill, including an UP
  - ▶ Teachers receive mastery when they follow up 50% of the time or more
  - ▶ In coding follow ups, there can be one statement spoken in between the Don't skills and a Do skill to still receive credit for a follow up
- ▶ TCIT's baseline assessment is a 5 minute coding of CLP, Academic Instruction and Transition
- ▶ CDI and TDI didactics are trained to educators in groups of 10 (with administrators present)
  - ▶ Teachers come for a 6 hour day training of CDI and TDI
  - ▶ Subs are utilized for teachers to be able to participate

# How is TCIT different than PCIT (cont'd)

## ▶ TCIT Layout:

- ▶ • 3-4 weeks into the semester the trainer will complete the pre-treatment DECA/DESSA assessments with teachers and trainer/trainees will complete the pre-treatment observations in each classroom
- ▶ • On the 4th week the trainer will conduct the CDI (Child Directed Interaction) didactic training with the teachers getting trained and their administrators. This is a six hour training in which the teachers will need subs for the day
- ▶ • Weeks 4-8 the trainer and trainees will conduct weekly TCIT coaching sessions in the classrooms focused on CDI solely.
- ▶ • On week 8 or 9 the trainer will conduct the TDI (Teacher Directed Interaction) didactic training with the same teachers and administrators. This is another six hours of training and practice so the teachers will need a sub for the day
- ▶ • The last 8 weeks of the semester the coaches will coach to both CDI and TDI in the classrooms for the remaining of the semester. The goal is to coach the teachers to TCIT mastery criteria

# How is TCIT different than PCIT (cont'd)

- ▶ Booster sessions
  - ▶ The teachers that were not able to meet the mastery criteria will receive a booster session monthly the following semester(s) until they are able to achieve mastery
  - ▶ Teachers who have achieved mastery then receive one booster session per quarter the remainder of the time they are teaching for that district
- ▶ TCIT coaching is different than PCIT in that coaches do not have as much time to comment or reply to the teachers due to communication with 20+ children as opposed to one
  - ▶ Coaching statements need to be succinct and purposeful

# How is TCIT different than PCIT (cont'd)

- ▶ Sit & Watch is utilized in this version of TCIT as opposed to the Time Out chair
  - ▶ Sit & Watches are done in the classroom for 1 min + 5 sec
  - ▶ The Back Up to Sit & Watch is typically a “Buddy Room” which is a chair in another teacher’s classroom (preferably trained in TCIT)
  - ▶ The Back Up is another 1 min + 5 sec
  - ▶ Some schools have what is called a Safe Room that can be utilized for complete isolation. These are most of time not close to the TCIT classroom and require a distance to travel.
  - ▶ Teachers are not allowed to physically handle children to get them to the Back Up spot

# Outcome schools request

- ▶ I have found that the Midwest schools that I have been in strongly prefer to treat for decreasing the acts of dangerous & destructive behavior in their schools as opposed to improving executive functioning skills
- ▶ Schools find academic performance extremely important, but are finding that they are not able to get to academic achievement unless kids are emotionally regulated

# Outcome Measures:

- ▶ I have chosen the SESBI-R behavior inventory to measure children's compliance and rate of dangerous & destructive behaviors.
  - ▶ Teachers are allotted up to 4 children to track in their classroom with the SESBI-R
  - ▶ Teachers complete one SESBI-R form each week on each child they pick throughout the treatment process
- ▶ I also utilize the DECA/DESSA assessment form to measure for children's social-emotional and executive functioning in the classroom
  - ▶ Teachers complete one pre-assessment form on EACH child in their classroom before the CDI didactic training (the beginning of the semester) and a post after the last coaching session (at the end of the semester)

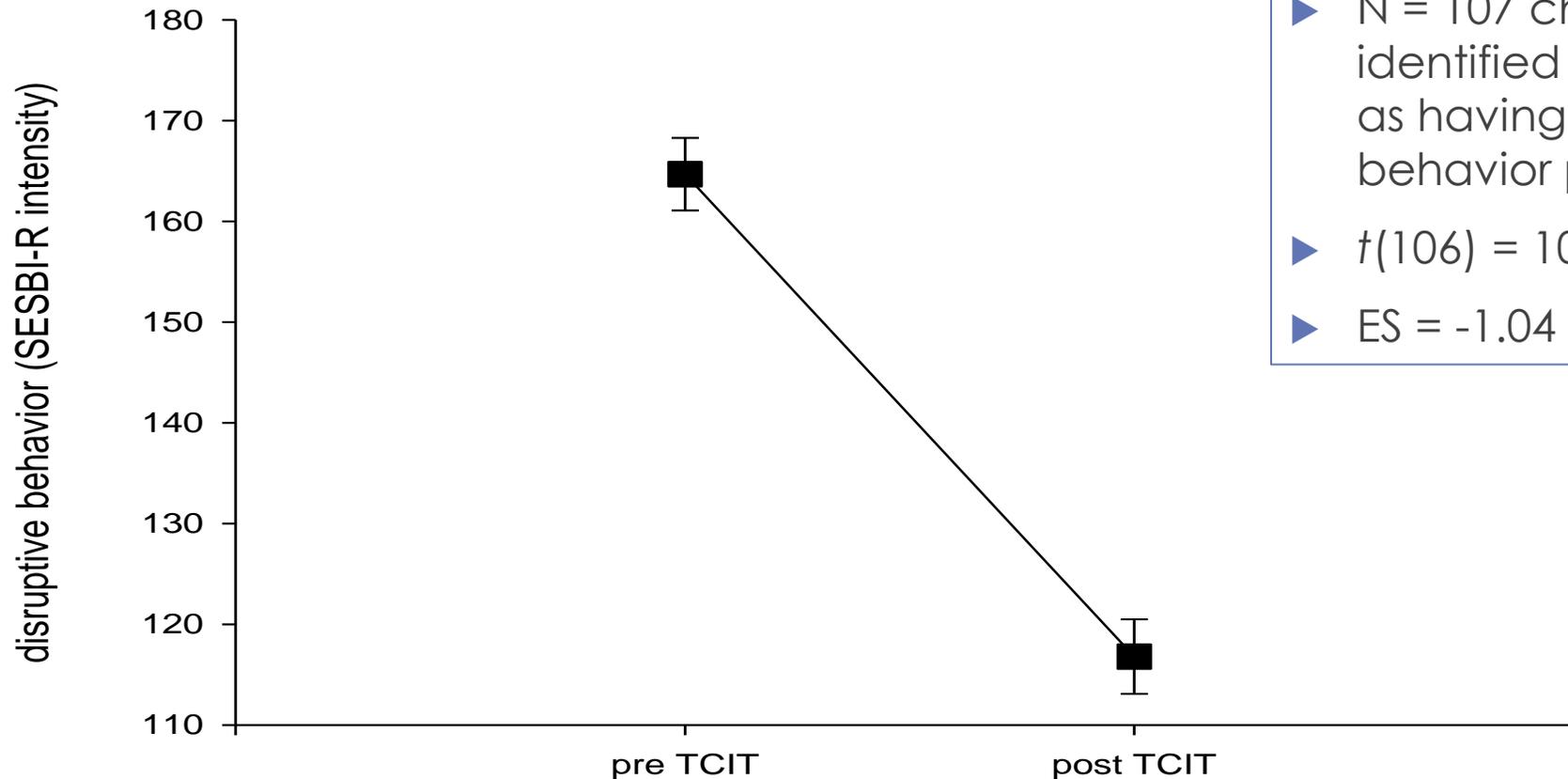
# Kelli's Outcome Data

## Outcomes Associated with Community Implementation of TCIT

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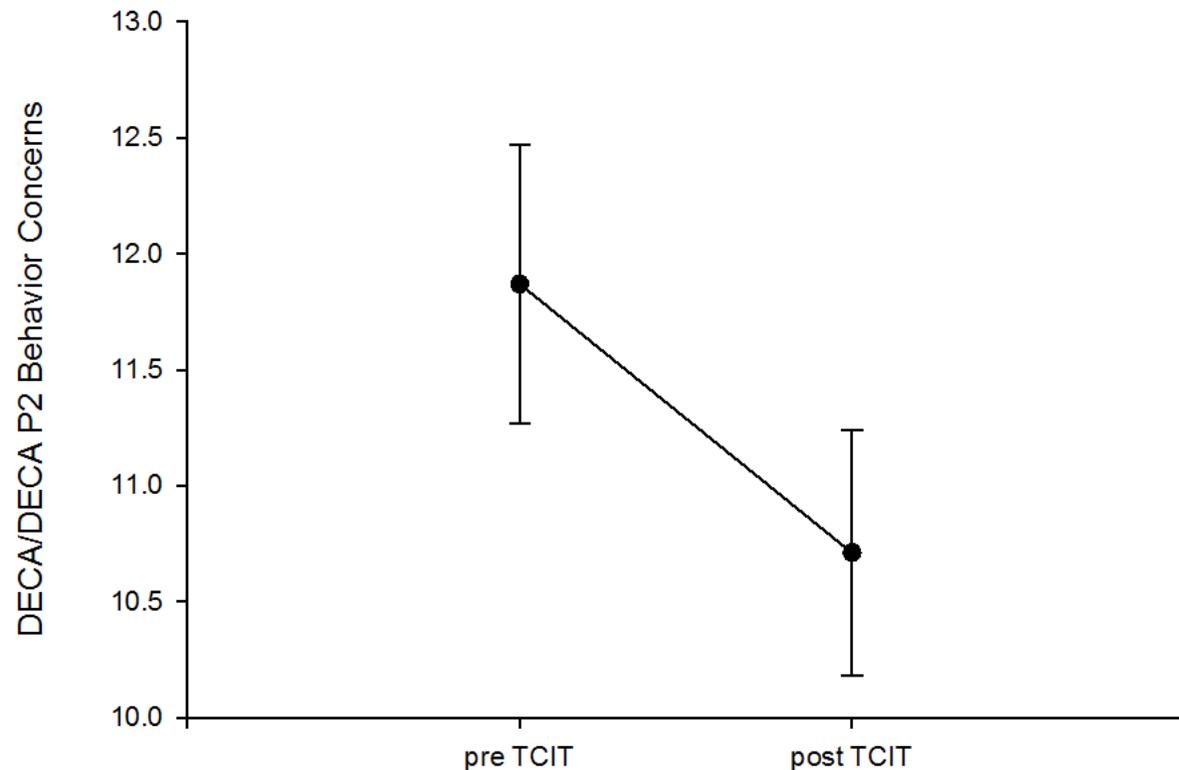
# Decrease in disruptive behavior – target children



- ▶ N = 107 children identified by teachers as having disruptive behavior prior to TCIT
- ▶  $t(106) = 10.65^{***}$
- ▶ ES = -1.04 large

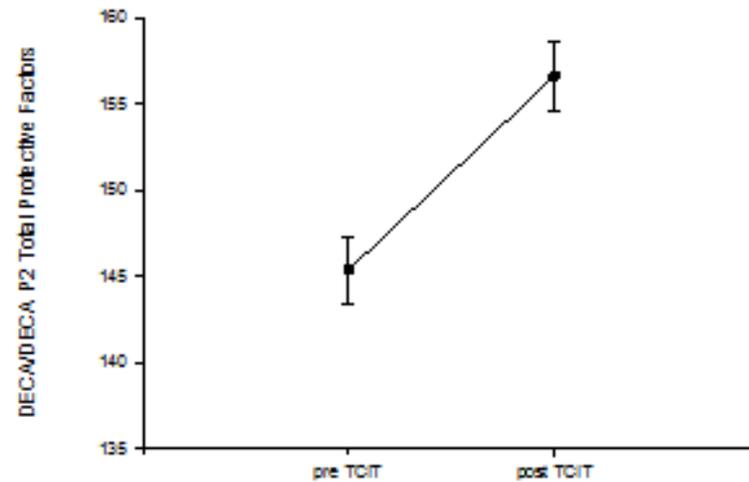
# Decrease in disruptive behavior – universal (all children)

- ▶ N = 163 children
- ▶  $t(162) = 2.79^{**}$
- ▶ ES = -.21 small



# Increase in resilience – universal (all children)

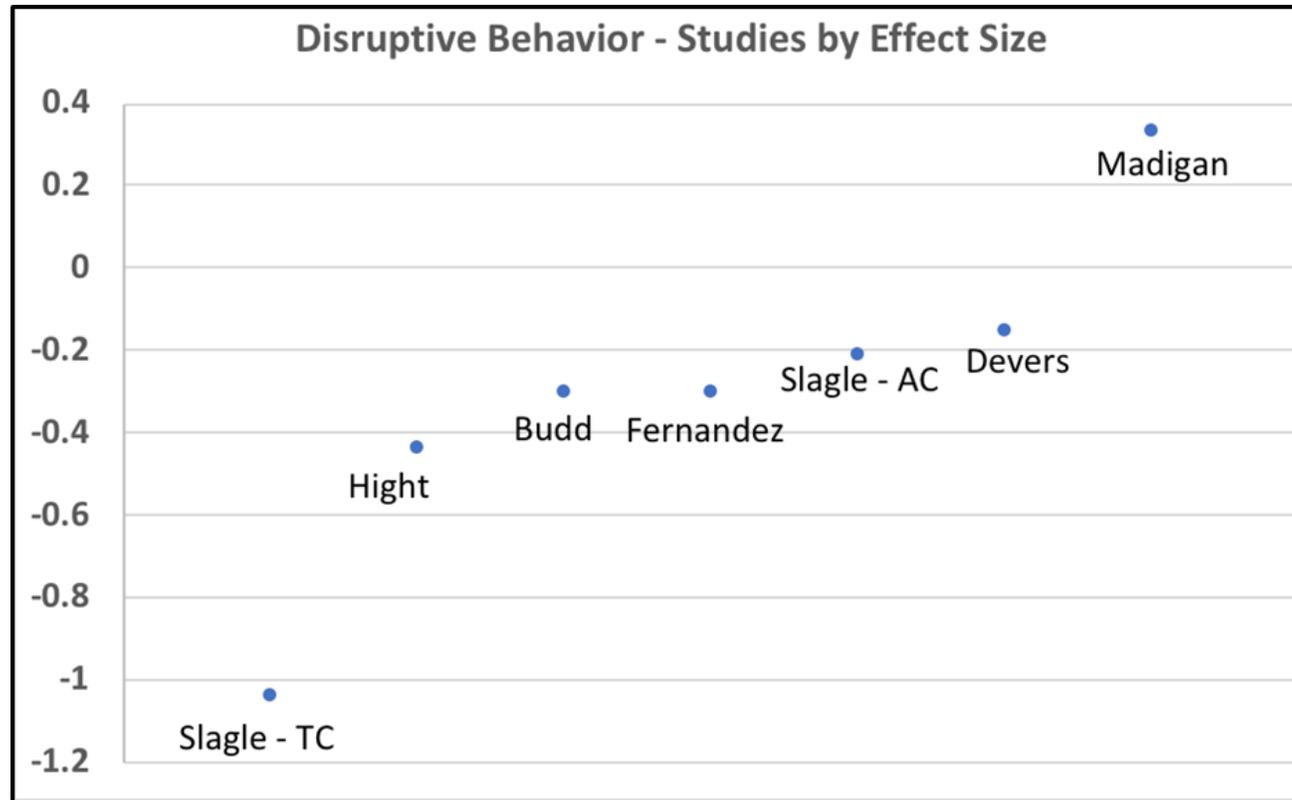
- ▶ N = 163 children
- ▶  $T(162) = 7.66^{***}$
- ▶ ES = .61 medium



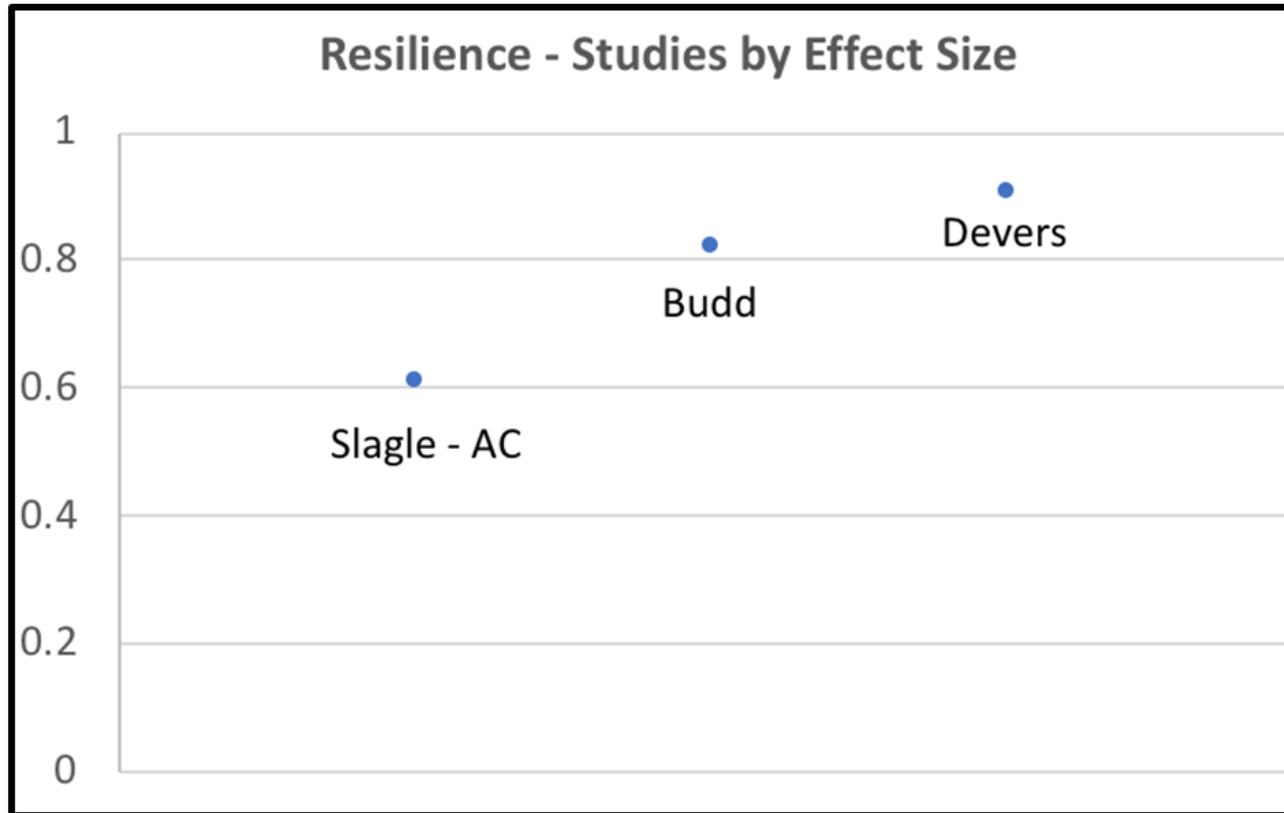
# Studies Selected for Benchmark

- ▶ Studies with  $N \geq 5$
- ▶ 5 studies for disruptive behavior
- ▶ 2 studies for resilience

# Comparison of Community Results (Slagle) to TCIT Studies



# Comparison of Community Results (Slagle) to TCIT Studies



# What We Learned

- ▶ TCIT outcomes in community setting are comparable to those in research studies of TCIT
- ▶ Kelli and her team are doing an excellent job of implementing TCIT!

# Future Directions

- ▶ We need better studies of TCIT
  - ▶ Randomized controlled trials
  - ▶ Outcomes assessed by independent evaluator
  - ▶ Studies examining whether outcomes generalize to other settings
  - ▶ Studies examining outcomes associated with combined treatment (TCIT + PCIT)

# Discussion