



# A Multi-State Examination of Accommodations for Students with Emotional and Behavioral Needs

Chair: Lee Kern

Presentation 1: Steven W. Evans, Julie S. Owens, Judy Harrison, & Craig F. Spiel

Presentation 2: Allyse A. Hetrick, Colleen E. Commisso, Lee Kern, & Beth A. Custer

Discussant: Joseph H. Wehby

# Symposium Agenda

- ❖ **Introduction**, *Lee Kern*
- ❖ **Definitions and Evidence for Accommodations for Students with Emotional & Behavioral Disorders**, *Steven W. Evans, Julie S. Owens, Judy Harrison, & Craig F. Spiel*
- ❖ **An Evaluation of IEP Accommodations for Secondary Students with Emotional and Behavioral Problems**, *Allyse A. Hetrick, Colleen E. Commisso, Lee Kern, & Beth A. Custer*
- ❖ **Discussion**, *Joseph H. Wehby*
- ❖ **Q&A**

# Definitions and Evidence for Accommodations for Students with Emotional & Behavioral Disorders



**Steven W. Evans<sup>1</sup>, Julie S. Owens<sup>1</sup>, Judy Harrison<sup>2</sup>, & Craig F. Spiel<sup>3</sup>**

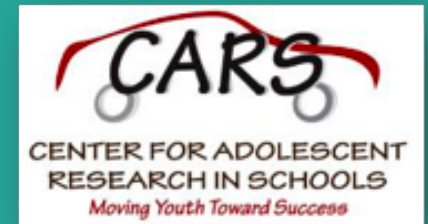
*1-Ohio University, 2-Rutgers University & 3-Intermountain Healthcare*



# An Evaluation of IEP Accommodations for Secondary Students with Emotional and Behavioral Problems



Allyse A. Hetrick, Colleen E. Commisso, Lee Kern, &  
Beth A. Custer  
*Lehigh University*



# Overview of Existing Research

- ❖ Students with EBD struggle to perform adequately in the classroom and on high stakes assessments

(Bradley, Doolittle, & Bartolotta, 2008; Carr-George, Vannest, Willson & Davis, 2009; Gage, Wilson, & MacSuga-Gage, 2014; Temple-Harvey & Vannest, 2012)

- ❖ Accommodations are an intentional support to assist students overcome performance obstacles and “level the playing field”

- ❖ Appropriate accommodations are important for a multitude of reasons

- Secondary students spend a majority of their day in regular education
- IDEA stipulates that eligible students receive them so that they can make progress in the general education curriculum and so that academic achievement can be measured on state/districtwide assessments.

# Overview of Existing Research

- ❖ Four main categories have been identified by a majority of states
  - Presentation (e.g., larger print, read aloud)
  - Response (e.g., using a calculator)
  - Timing/Scheduling (e.g., providing breaks, extended time)
  - Setting (e.g., small group testing, preferential setting)
  
- ❖ Research has indicated that accommodations have been not been selected on student characteristics but other factors instead

(Fuchs & Fuchs, 2001; Fuchs, Fuchs, Eaton, Hamlett, Binkley, & Crouch, 2000; Maccini & Gagnon, 2006; McKeivitt & Elliot, 2001; Schulte, Elliot, & Kratochwill, 2001; Ysseldyke et al., 2001)



- Limited research is available to guide selection of appropriate accommodations
- Most research has been conducted at the elementary grade level
- There is little evidence supporting the effectiveness of specific accommodations to address emotional or behavioral problems

**Research Gaps**

# Purpose and Research Questions

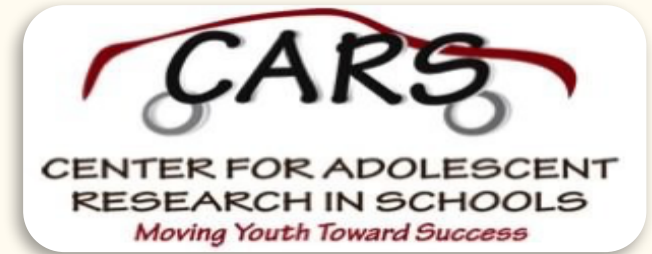
1. What types of accommodations do high school students who exhibit emotional and behavioral problems receive in the classroom and on state/districtwide assessments? Does accommodation type differ depending on special education classification?
2. Do accommodations that high school students with emotional and behavioral problems receive in the classroom and on state/districtwide assessments differ depending on student demographic variables (i.e., gender, disability category, ethnicity, grade level, or state of residence)?
3. Among high school students identified as having emotional and behavioral problems, do the types of accommodations received, either in the classroom or on state/districtwide assessments, differ depending on their academic, emotional, or behavioral functioning?

The purpose of this study was to investigate the types of accommodations provided to secondary students with emotional and behavioral problems, the manner in which accommodations were used (i.e., classroom or standardized assessments), and variables related to accommodation selection.



# Center for Adolescent Research in Schools

Data from the Center for Adolescent Research in Schools (CARS) were analyzed in order to answer the research questions



## What is CARS?

A center grant, funded by IES, to develop an intervention package for high school age students with social, emotional and behavioral problems across three years and evaluate the package via a 2-year RCT (Kern, Evans & Lewis, 2008-2013)

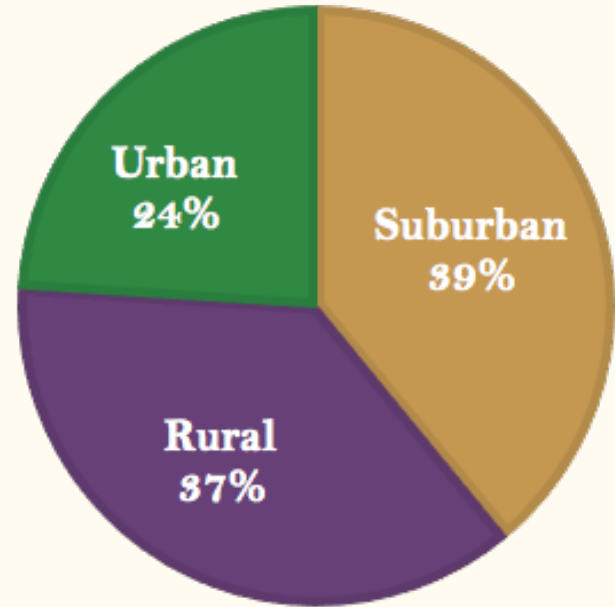
# CARS Study Setting

❖ 54 high schools across five states participated in a randomized controlled trial

- Kansas ( $n = 5$ )
- Missouri ( $n = 7$ )
- Ohio ( $n = 16$ )
- Pennsylvania ( $n = 10$ )
- South Carolina ( $n = 16$ )

❖ Schools were fairly evenly distributed across community locations

- 39% suburban
- 37% rural
- 24% urban



# CARS Eligibility Screening

All students were screened by CARS staff to determine eligibility.

## Inclusion Criteria

- ❖ Grade 9-11 at start
- ❖ Presence of emotional/behavioral need as indicated by teacher referral and a *T*-score of 60 or above on at least one of the following assessments:
  - ◆ Behavior Assessment System for Children, 2<sup>nd</sup> Ed. (BASC-2)
    - Internalizing or Externalizing Composites
  - ◆ Multidimensional Anxiety Scale for Children (MASC)
  - ◆ Reynolds Adolescent Depression Scale, 2<sup>nd</sup> Ed. (RADS-2)

# CARS Eligibility Screening

Students also had to demonstrate *impairment in school functioning*

Impairment in school functioning was indicated by any 2 of the following:

- 4 or more office referrals across the semester prior to enrollment or 5 or more in any month of the current semester
- 5 or more absences (other than illness) or tardies in a month
- 2 or more in- or out-of-school suspensions in the current year
- One or more Fs or two or more Ds in any core academic subject in one of the 2 most recent grading periods

Exclusion Criteria

- Diagnosis of autism
- IQ below 75

*647 participants met the study criteria and consented to participate*

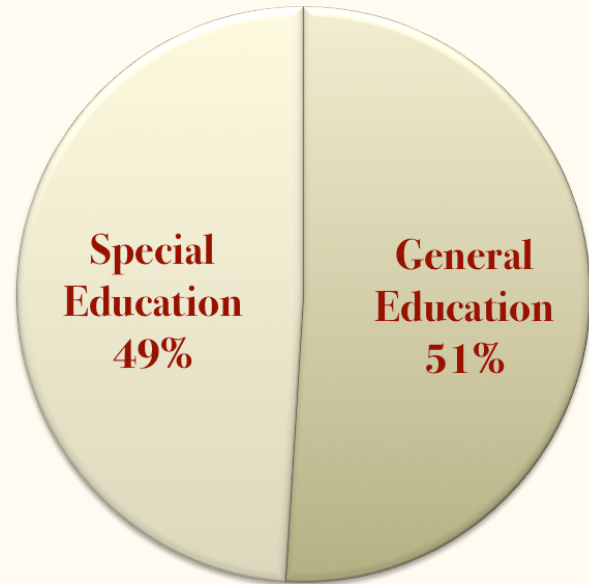
# Special Education Status

All students demonstrated emotional and behavioral needs; however, not all students received special education services

$N = 647$

49% Special Education ( $N = 317$ )

51% General Education ( $N = 330$ )



# Study Procedures

- ❖ The larger RCT focused on addressing student social, emotional, behavioral, and academic needs and improving classroom structure and supports
- ❖ Data were collected at several time points throughout the study for students in both the treatment and control groups

## The Current Study

- Available data were analyzed for students who had a special education label in both treatment and control groups ( $N = 222$ )
- Data were used from measures administered at baseline and the earliest IEP available after consent was obtained

## Participant Characteristics (N = 222)

### Disability Category

SLD	112 (50.5%)
EBD	56 (25.2%)
OHI	46 (20.7%)
Other	7 (3.2%)

### Gender

Male	162 (73%)
Female	60 (27%)

### Race

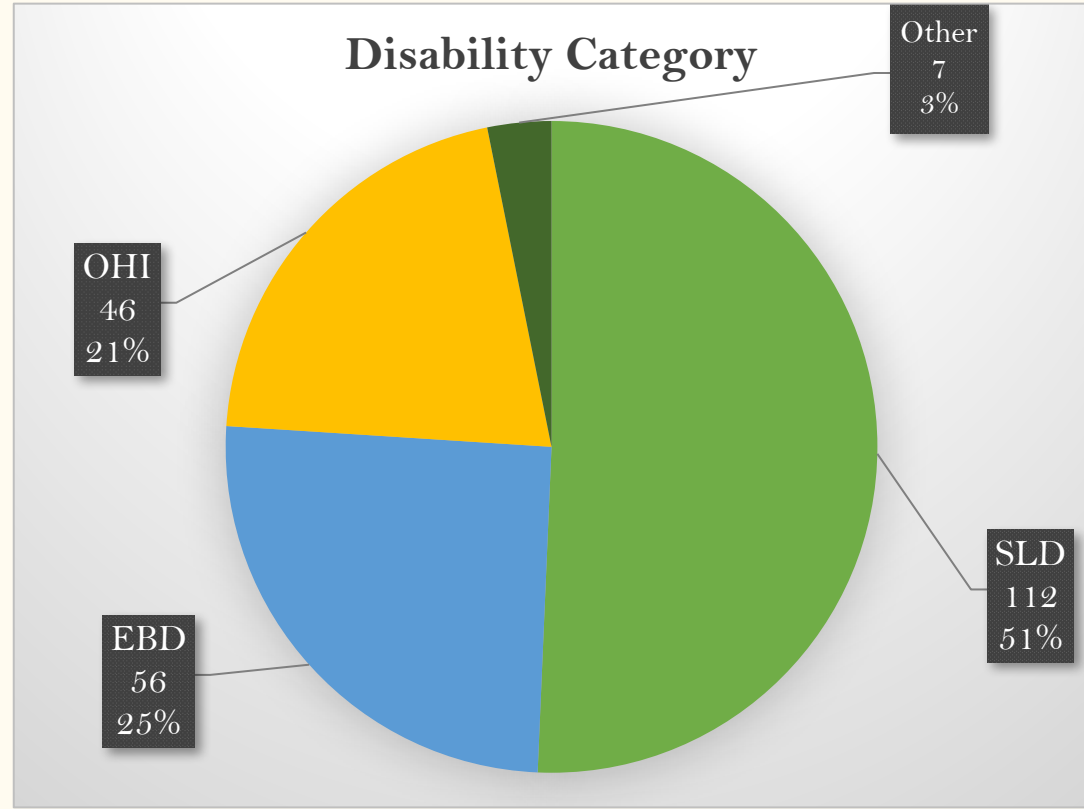
White	119 (53.6%)
Non-white	103 (46.4%)

### Grade

8	6 (2.7%)
9	62 (27.9%)
10	103 (46.4%)
11	44 (19.8%)

### State of Residence

Pennsylvania	51 (23%)
Ohio	66 (29.7%)
Missouri	18 (8.1%)
South Carolina	64 (28.8%)
Kansas	23 (10.4%)



Total Items Listed as Accommodations  
 $N = 1,925$

**STEP 1**  
Each accommodation was coded into one of 4 categories

Accommodations  
 $n = 1840$

Excluded Items  
(e.g., modifications, SDI, items that were too vague)  
 $n = 85$

A number of accommodations did not fall into one of the 4 common categories

Presentation  
 $n = 464$

Response  
 $n = 205$

Timing/  
Scheduling  
 $n = 458$

Setting  
 $n = 508$

Other  
 $n = 205$

**STEP 2**  
Reviewed "others" to identify similar themes. Three new categories emerged.

Check  
 $n = 60$

Cue/Prompt  
 $n = 102$

Structured Behavioral Strategies  
 $n = 43$



# Coding Categories

## **Presentation**

altering material(s) or test(s) so it is presented in a non-standard manner

## **Response**

any change in the way a student responded to questions, assignments, or activities.

## **Timing/Scheduling**

changing the standard timing of the activity, assignment, or assessment

## **Setting**

changes in the usual classroom location or structure where a student received instruction or participated in an assessment

## **Check**

“checking in” with the student to increase the likelihood that he/she understood the content, directions, or behavioral expectations

## **Cues/Prompts**

providing behaviorally-related verbal or visual prompts, cues, or redirections, when it is evident that the student has previous knowledge of the behavioral expectations

## **Structured Behavioral Strategies**

systematic approaches to support behavior

Category	Examples
<b>Presentation</b>	<i>presenting material in an auditory or multi-sensory format (e.g., read aloud); amplifying teacher talk; providing a study guide, checklist, or teacher notes; altering print or format</i>
<b>Response</b>	<i>using electronic devices (e.g., speech to text translator, calculators), dictating to a scribe, providing graph paper to align responses; or highlighting answers</i>
<b>Timing/ Scheduling</b>	<i>extended time, allowing breaks from setting or activity, chunking long term assignments into smaller parts, allowing access to staff (i.e., nurse, guidance, case manager) in response to emotional/behavioral need (e.g., expression of anxiety or frustration, behavioral escalation)</i>
<b>Setting</b>	<i>preferential seating (e.g., increasing proximity to teacher, seating in front of classroom) or completing assessments/assignments in another setting (e.g., special education classroom, small group, 1:1 context)</i>
<b>Check</b>	<i>asking a student about how he/she should behave in a novel situation (setting, new task), periodically monitoring student progress on an assignment or assessment to ensure understanding, asking the student to repeat directions, assisting the student with organization (e.g., checking to assure homework was recorded)</i>
<b>Cues/ Prompts</b>	<i>reminding student of rules, providing cues/prompts (including electronic) of expected behavior, providing verbal or gestural redirection</i>
<b>Structured Behavioral Strategies</b>	<i>positive behavior support plans, consistent use of positive reinforcement for following expectations, daily behavioral report cards or point sheets, and/or delivering specific praise for appropriate behavior</i>

# Intercoder Agreement

## ❖ Initial Coding

- 55 of the 222 IEPs (25%) which included 24% of the 1,925 total accommodations coded were randomly selected to assess ICA
- The accommodations were coded into the first four categories and “other” accommodations
- Total agreement was 97%

## ❖ Second Coding

- ICA was assessed for 35% of the accommodations initially coded as “other” (130 of 370) after they were recoded in the three new categories
- Total agreement was 88%

# Question 1 Data Analysis

## Q1: Types of accommodations received by students with emotional or behavioral problems

### *Variables*

#### Accommodation Type

- Presentation (yes/no)
- Response (yes/no)
- Timing/Scheduling (yes/no)
- Setting (yes/no)
- Check (yes/no)
- Cues/Prompts (yes/no)
- Structured Behavioral Interventions (yes/no)

#### IDEA Disability Category

SLD  
EBD  
OHI  
Other

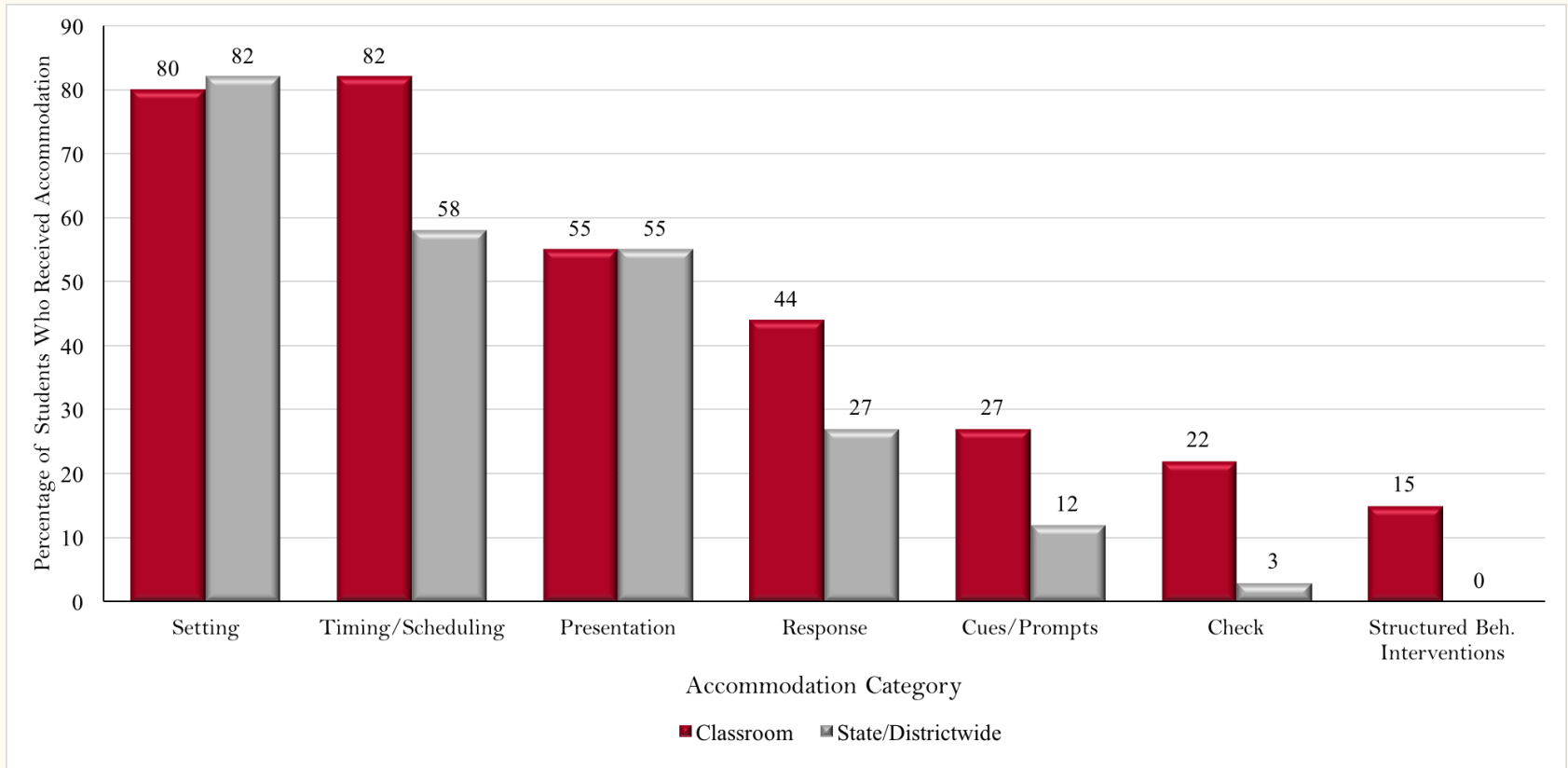
### *Analysis*

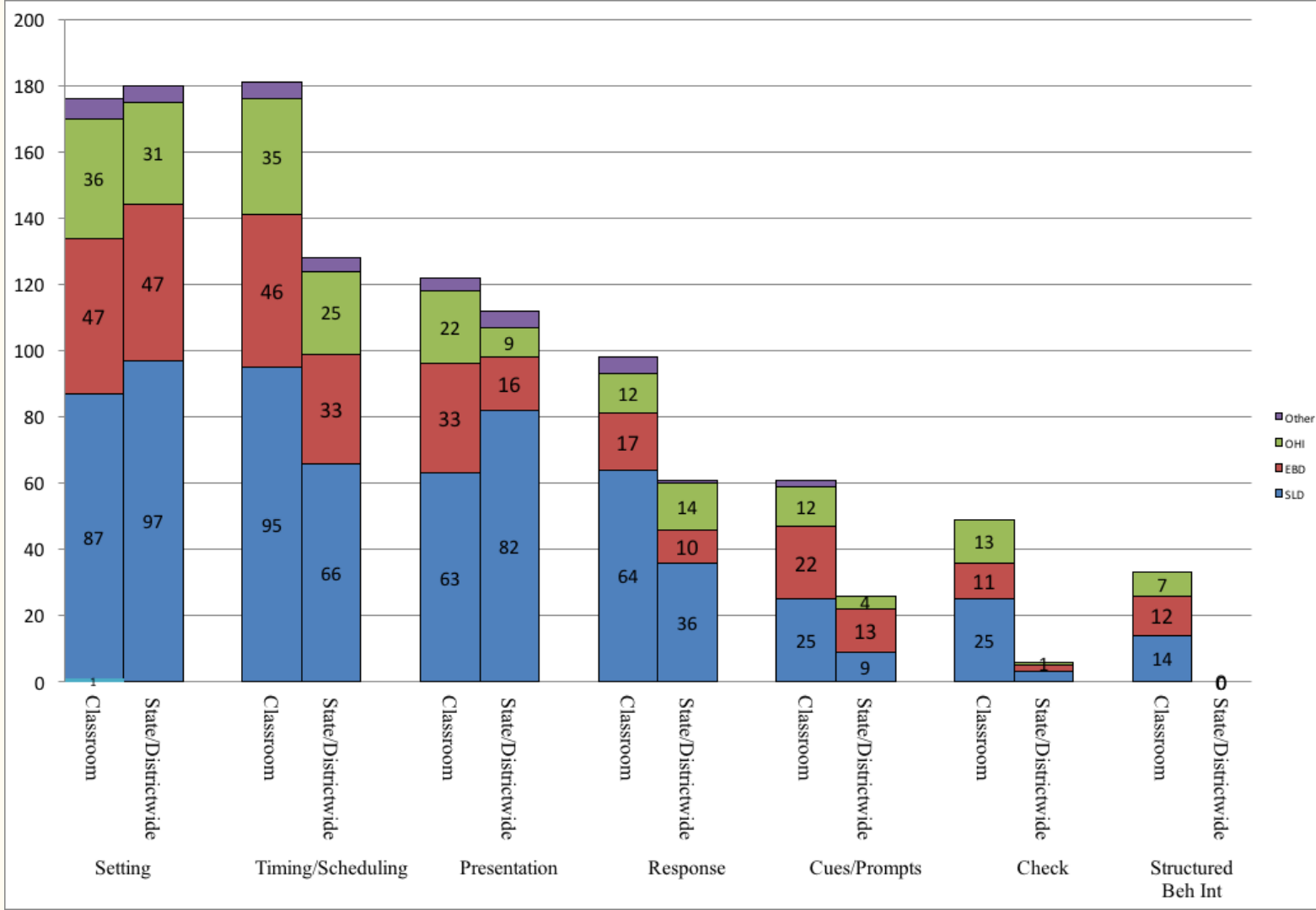
Data were analyzed descriptively in order to determine the frequency and percentage of students who received at least 1 of each type of accommodation.

*Accommodations used in the classroom and those designated for state/districtwide assessments were analyzed separately*

# Question 1 Results

## *Percentage of Students who Received Each Accommodation Type*





# Question 1 Results

## *Most Frequent Specific Accommodations*

### Classroom

1. Extended Time - Assignments (51%)
2. Extended Time - Tests (48%)
3. Small Group Testing (48%)
4. Tests Read Aloud (41%)
5. Preferential Seating (41%)

### State/Districtwide Testing

1. Small Group Testing (90%)
2. Extended Time (56%)
3. Tests Read Aloud (52%)
4. Calculator (22%)
5. Breaks (21%)

# Question 2 Data Analysis

## Q2: Relationships between accommodation types and student demographic characteristics

### ***Variables***

#### Accommodation Type

- Presentation (yes/no)
- Response (yes/no)
- Timing/Scheduling (yes/no)
- Setting (yes/no)
- Check (yes/no)
- Cues/Prompts (yes/no)
- Structured Behavioral Interventions (yes/no)

#### Demographic Characteristics

- gender (male, female)
- grade level (8,9,10,11)
- disability category (SLD, EBD, OHI, Other)
- race (white/non-white)
- state of residence (PA OH, MO, KS, SC)

### ***Analysis***

Pearson's chi-square tests were conducted to determine if there was a significant relationship between each type of accommodation and demographic characteristics.

Effect sizes were evaluated using Cramer's  $V$  and adjusted standardized residuals were examined in order to interpret significant associations.

*Accommodations used in the classroom and those designated for state/districtwide assessments were analyzed separately*



# Question 2 Results

## Q2: Relationships between accommodation types and student demographic characteristics

### Classroom

- Significant differences across states
  - students in Missouri received more Presentation accommodations than expected ( $z_{adj} = 2.6$ )
  - students in Kansas received less Presentation accommodations ( $z_{adj} = -4.4$ ).
  - students in Missouri received less Setting accommodation in the classroom ( $z_{adj} = -3.2$ )
  - students in Pennsylvania appear to be significantly more likely to receive a Structured Behavioral Intervention ( $z_{adj} = 5.6$ ) and Check accommodations ( $z_{adj} = 3.4$ )
- Significant associations were found between having an SLD label and receiving Response accommodations.

### State/Districtwide Testing

- Significant differences across states
  - students in Ohio received Timing/Scheduling more frequently ( $z_{adj} = 6.6$ )
  - students in Pennsylvania received Check accommodations more frequently ( $z_{adj} = 2.7$ )
  - students in Kansas received Response accommodations more frequently ( $z_{adj} = 2.5$ )
  - students in Pennsylvania received Cue/Prompt accommodations more frequently ( $z_{adj} = 4.7$ )
- Significant differences across disability groups
  - Students with SLD were likely to receive Presentation accommodations, especially compared to students with EBD
  - Students with EBD received Cue/Prompt accommodations more frequently

# Question 3 Data Analysis

## Q3: Differences in accommodations depending on academic or behavioral functioning

### *Variables*

#### Accommodation Type

- Presentation (yes/no)
- Response (yes/no)
- Timing/Scheduling (yes/no)
- Setting (yes/no)
- Check (yes/no)
- Cues/Prompts (yes/no)
- Structured Behavioral Interventions (yes/no)

#### Behavioral Functioning

- Behavior Assessment System for Children, 2<sup>nd</sup> Ed. (BASC-2)
  - Parent Externalizing
- Multidimensional Anxiety Scale for Children, (MASC)
- Reynolds Adolescent Depression Scale, 2<sup>nd</sup> Ed. (RADS-2)

#### Academic Functioning

- Woodcock Johnson Tests of Achievement, 3<sup>rd</sup> Ed. (WJ-III)
  - Broad Reading
  - Broad Math

### *Analysis*

Independent samples *t*-tests were conducted comparing each accommodation type across standardized measures of academic and behavioral functioning.

Effect sizes were examined using Cohen's *d*.

*Accommodations used in the classroom and those designated for state/districtwide assessments were analyzed separately.*

# Question 3 Results

## Q3: Differences in accommodations depending on academic or behavioral functioning

### Classroom

- Students who received a Response accommodation (e.g., calculator) in the classroom had significantly lower WJ-III Broad Math scores than students who did not receive a Response accommodation ( $p = .005$ )

### State/Districtwide Testing

- Students who received a Presentation accommodation (e.g., read aloud) had significantly lower WJ-III Broad Math scores and WJ-III Broad Reading scores than students who did not (WJ-III Math,  $p = .001$ ; WJ-III Reading,  $p < .001$ )
- Students who received a Response accommodation had significantly lower WJ-III Broad Math scores than students who did not receive a Response accommodation ( $p = .001$ )
- Students who received a Check accommodation demonstrated significantly greater risk for anxiety, as measured by the MASC than students who did not receive a Check accommodation ( $p = .035$ )

## Summary of Findings

**Overall, our findings were consistent with previous research indicating that accommodation selection is a highly imprecise practice.**

- 3 additional categories emerged that occurred relatively frequently across IEPs
- Presentation and Setting accommodations were provided at equivalent or nearly equivalent rates in the classroom and on state/districtwide assessments. All other accommodations, however, were provided far less frequently (or not at all) on state/districtwide assessments than in the classroom
- There was variability in some types of accommodations relative to disability label and state of residence

# Implications for Practice

Procedures that teachers use to select accommodations

- are not matched to student need and therefore may not be optimally beneficial
- are often selected based on irrelevant student characteristics
- may not be provided impartially across disability groups



**Teachers need guidance to help select an appropriate number of accommodations that effectively meet students individual emotional and behavioral needs.**

# Future Directions

- ❖ Further exploration of the manner in which accommodations are developed for students with emotional behavioral problems
- ❖ Evaluation of the benefit of selected accommodations
- ❖ Research investigating if multiple accommodations offer an additive benefit
- ❖ Training for teachers to select appropriate accommodations for students

Kern, L., Hetrick, A.A., Custer, B.A., & Comisso, C. E. (in press). An evaluation of IEP accommodations for secondary students with emotional and behavioral problems. *Journal of Emotional and Behavioral Disorders*.



Discussion...