National Center for School Mental Health (NCSMH)

Innovations in Internalizing: Advances in Screening and Early Identification Practices

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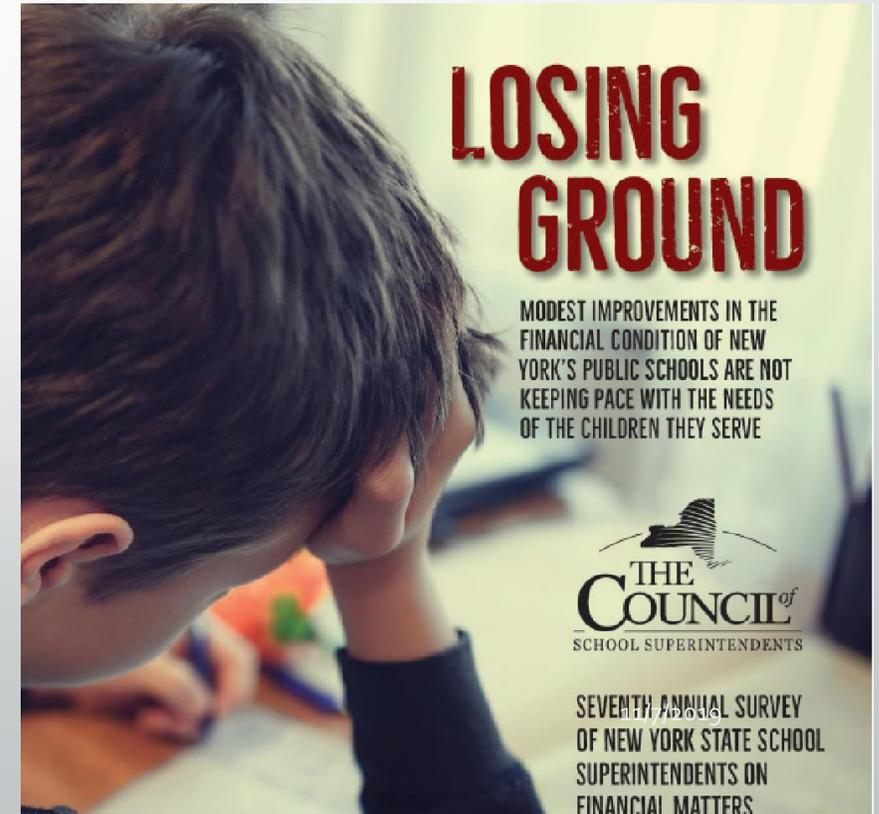State University of New York College at Oswego

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Background: Students' Emotional-Behavioral Health
I've been waiting...

- **ESSA** Emphasizes children's mental health in the schools- title 1 finds for MTSS, funds for safe/health schools

- The New York State Council of School Superintendents statewide survey of its members **Children's' mental health/emotional well-being #1 priority** (the daily star.com)

- MTSS taking root Nationally

- McDougal's story (1998)

LOSING GROUND

MODEST IMPROVEMENTS IN THE FINANCIAL CONDITION OF NEW YORK'S PUBLIC SCHOOLS ARE NOT KEEPING PACE WITH THE NEEDS OF THE CHILDREN THEY SERVE

THE COUNCIL of SCHOOL SUPERINTENDENTS

SEVENTH ANNUAL SURVEY OF NEW YORK STATE SCHOOL SUPERINTENDENTS ON FINANCIAL MATTERS

Why are we doing this?
We have lots of Children

Children- 2010, there were **74.2** million children 17 or under in the US (26 % of the population).

- **54 %** were white, non-Hispanic;
- **23** % Hispanic,
- 14 % African-American,
- 4 % Asian-Pacific, and
- 5% all others

Children's Mental Health Needs, Disparities and School-Based Services: A Fact Sheet
Children's Mental Health Needs, Disparities and School-Based Services: A Fact Sheet

Updated February 28, 2012

Prevalence & Progression:

Behavioral health needs

- 21 % experienced symptoms of a DSM disorder during the course of a year.

- 11 % experienced significant impairment

- 5 % experienced extreme functional impairment.

- **75 to 90% of students in need of services do not receive them.**

- **Progression of disorders is stable and very predictable**

  - Externalizing behaviors-tantrums, ODD, CD

  - Internalizing difficulties- anxiety, depression, suicide

  - Cognitive/attention problems- focus, attention, concentration, diminished learning

Youth Risk Behavior Surveillance System (YRBSS)
conducted by the CDC

- The YRBSS is a national survey, conducted by CDC, provides data representative of 9th through 12th grade students in public and private schools in the United States

- developed in 1990 to monitor health behaviors that contribute markedly to the leading causes of death, disability, and social problems

- surveys are conducted every two years, usually during the spring semester

- From 1991 through 2017, the YRBSS has collected data from more than 4.4 million high school students in more than 1,900 separate surveys
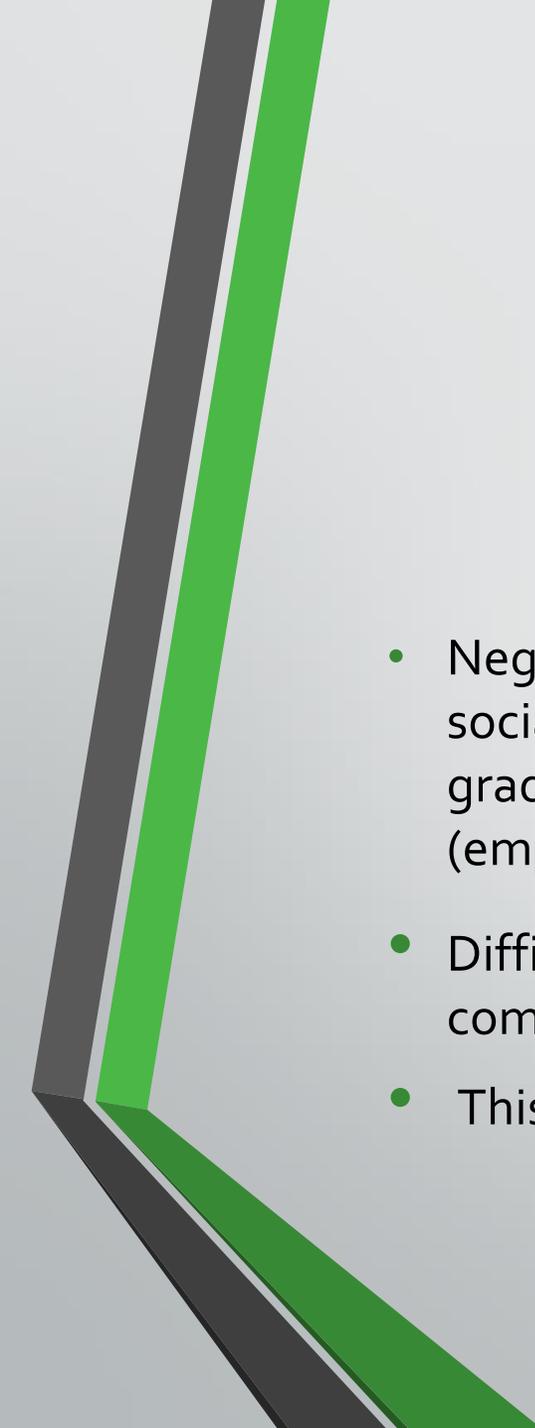
- Available at: https://www.cdc.gov/healthyyouth/data/yrbs/overview.htm

9/28/2018

2017 Youth Risk Behavior Survey: SURVEY SAYS…..

Overall High school students report:

- 19.0% had been bullied on school property
- 31% report persistent feelings of hopelessness
- 17 % considered suicide
- 14% developed a suicide plan
- 7.4% had attempted suicide

9/28/2018

Internalizing/affect problems Negative Long Term Outcomes

- Negative affect can significantly diminish social functioning, student well being, grades, attendance, and later life outcomes (employment, relationships)

- Difficulties include anxiety, depression, compulsive/negative thoughts

- This can lead to the ultimate tragedy

- Students with internalizing difficulties are generally under identified and not referred for support

- Teacher referral and/or nomination procedures still under identify.

- Universal screening procedures dramatically improve identification rates to intervene with students who are suffering.

Suicide

- Nearly 30,000 Americans commit suicide every year.

- In the U.S., suicide rates are highest during the spring.

- Suicide is the 3rd leading cause of death for 15 to 24-year-olds and 2nd for 24 to 35-year-olds.

- On average, 1 person commits suicide every 16.2 minutes.

- Each suicide intimately affects at least 6 other people.

9/28/2018

Summary: Common Behavioral Health Concerns

Externalizing

- Irritable, ODD, BD, CD, ASPD

- Comorbid/ Co-occurring ADHD, LD, thought disorders, and learning problems

- Also significant number with internalizing problems

Internalizing: **Our Focus Today**

- Anxiety, OCD and Depressive disorders all have an increased risk for suicide...

- Comorbid with social, learning, and adaptive problems.

Cognitive/ Attention

 also related to problems in learning, conduct, and social skills

Change....

But what do we do ?

Early Identification & Intervention

- Progression of disorders is predictable

- Early identification & intervention with children at risk for emotional behavior disorders appear to be the "most powerful course of action for ameliorating life-long problems associated with children at risk for EBD" (Hester et al., 2004)

- Younger children are more likely to be responsive and maintain positive outcomes from early prevention/ intervention programs (Bailey, Aytch, Odom, Symons, & Wolery 1999)

School Teachers Can Improve Students' Mental Health, Study Finds

- examined 43 studies that evaluated nearly 50,000 students who had received school-based mental health services

- **Mental health interventions that were integrated into the regular curriculum were the most effective.**

**The Effectiveness of School-Based Mental Health Services for Elementary-Aged Children: A Meta-Analysis**

Amanda L. Sanchez, MS, Danielle Cornacchio, MS, Bridget Poznanski, BS, Alejandra M. Golik, BA, Tommy Chou, MS, Jonathan S. Comer, PhD

J Am Acad Child Adolesc Psychiatry 2018;57(3):153–165.

9/28/2018

The evolution of 3 tiered models of support

MTSS
Multi Tiered Systems of Support

RTI
Response to Intervention

PBIS
Positive Behavioral Interventions and Supports
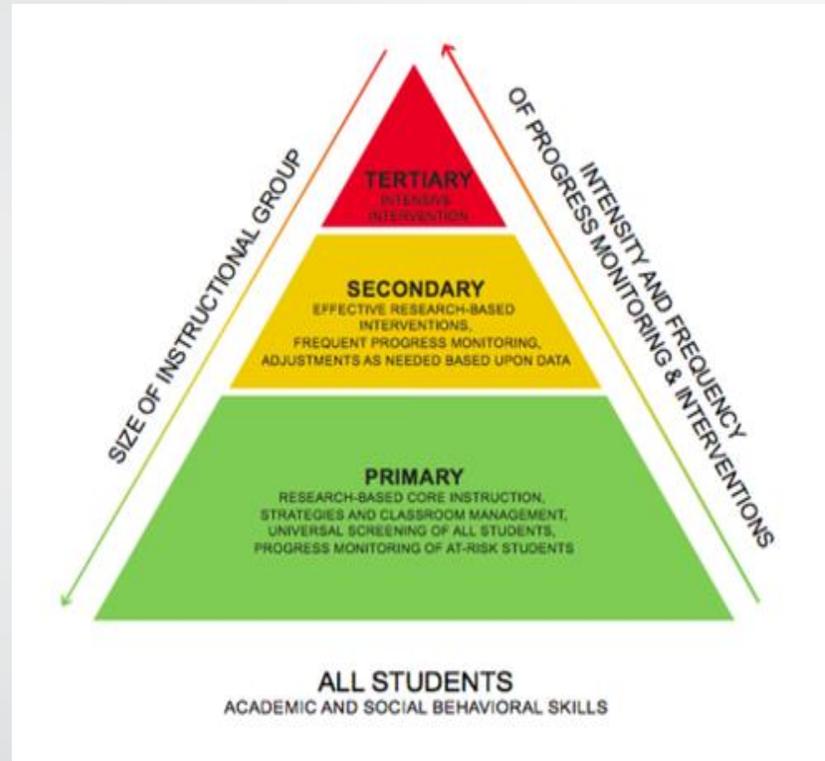
ISF
Interconnected Systems Framework

Q: What is the **foundation** for all effective tiered systems of support?

Think about the Evolution

- RTI: high rates of illiteracy, outcomes of LD students were poor.

- Lack of screening, intervention, and PM hampered efforts

- The Foundation for RTI: CBM research-screening, informed interventions and PM

- MTSS: similar levels-students at risk and very poor outcomes

- Current lack of screening and PM inhibits effective intervention

- MTSS- UA and PM is the foundation for improved practices
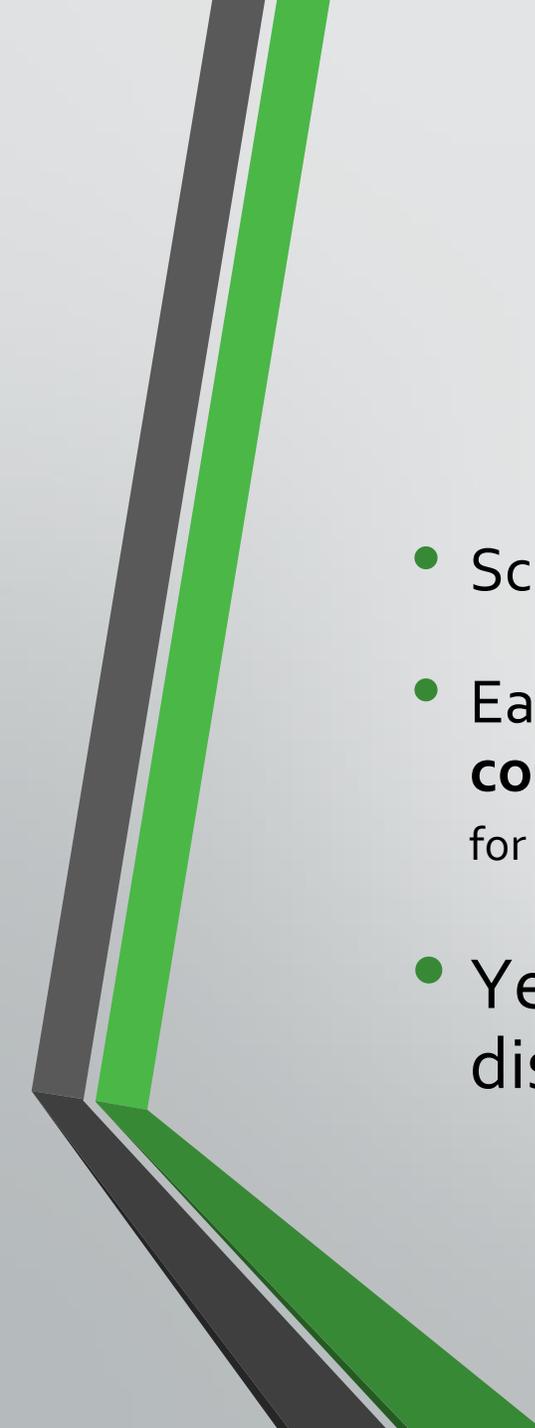
RtI and Behavior
Need for Universal Behavior Screening

- Schools **ARE** the ideal setting Screening (Wu et al., 1999).

- Early identification and intervention appear to be the **most powerful course of Intervention** for ameliorating life-long problems associated with children at risk for EBD" (Hester et al., 2004)

- Yet Behavioral Health Screening occurs in about **3-5%** of districts across the country.

How have schools been identifying students…

- Office discipline referrals/ suspensions
- Attendance
- Course Grades

So…what is the issue?

- Poor reliability
- Subjective
- Ineffective for identifying students with internalizing/ social difficulties

Selecting a Universal Screening Measure:
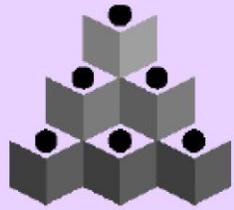## Technical Adequacy Considerations

Norms-utility

- sample populations based on census data**, includes clinical and typical samples**

Reliability-accuracy

- Internal consistency
- Test retest
- Inter-scorer

- **Validity-meaningful, screening ability**
  - Content
  - Concurrent
 - Predictive-Screening Accuracy: **can't have this without clinical and typical samples**

Response to Intervention and School-wide Positive Behavior Support

- Horner; Q & A Document.

- **For Universal Screening** we use the SSBD for elementary schools (see work of Lucille Eber in Illinois), but basically rely on ODRs and teacher reports at middle and high school. **If 2–3 times a year your teachers nominate students who engage in behavior that is a barrier to their social and/or academic achievement you will identify most kids needing early support.**

- **But is this really the case?**

11/7/2019

Systematic Screening for Behavior Disorders (SSBD) - **Walker, Stevenson, & Feil, 2014**

- Validated by the Program Effectiveness Panel of the U.S. Department of Education
- Now a two-stage, gated screening system
- Commonly referred to as the "gold standard"
- Evaluates student behavior on two dimensions:
  - Externalizing Behaviors
  - Internalizing Behaviors
- Originally intended for elementary-aged students
- Second edition added Pre-K and middle school screening
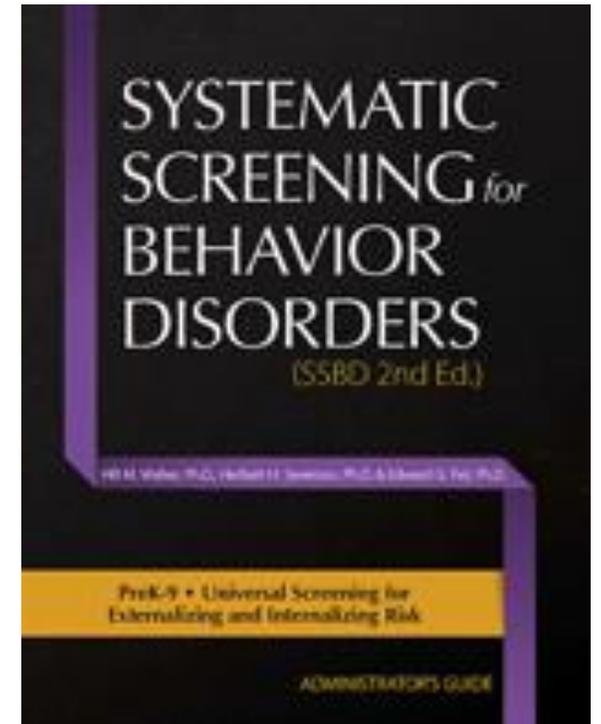
SSBD Stage 1

- Stage 1: Nomination Procedure
  - Teachers are given description of internalizing and externalizing behavior patterns
  - Teacher lists 10 students from class who they believe best exhibits internalizing or externalizing behavior(s)
  - Teacher rank-orders students from "most like" to "least like"
  - Teacher completes two lists, one for internalizing and one for externalizing behaviors
  - The 6 highest ranked students, 3 from each list, pass through Gate 1 into Stage 2

Rank Ordering on Externalizing Dimension

Externalizing refers to all behavior problems that are directed outwardly, by the child, toward the external social environment. Externalizing behavior problems usually involve behavioral excesses, (i.e., too much behavior) and are considered inappropriate by teachers and other school personnel. **Nonexamples** of externalizing behavior problems would include all forms of adaptive child behavior that are considered appropriate to the school setting.

Examples include:
- Displaying aggression toward objects or persons
- Arguing
- Forcing the submission of others
- Defying the teacher
- Being out of seat
- Not complying with teacher instructions or directions
- Having tantrums
- Being hyperactive
- Disturbing others
- Stealing
- Not following teacher or school imposed rules

Nonexamples include:
- Cooperating, sharing
- Working on assigned tasks
- Making assistance needs known in an appropriate manner
- Listening to the teacher
- Interacting in an appropriate manner with peers
- Following directions
- Attending to task
- Complying with teacher requests
- Cooperating, sharing

Instructions:
1. Review the definition of externalizing behavior and then review a list of all students in your class.
2. In Column One, enter the names of the three students who characteristic behavior patterns most closely match the externalizing behavioral definition.
3. In Column Two, rank order the students listed in Column One according to the degree or extent to which each exhibits externalizing behavior to the greatest is ranked first and so on until all three students are rank ordered.

COLUMN ONE List Externalizers	COLUMN TWO Rank Order Externalizers
Student Names*	Student Names*

SSBD Stage 2

- Stage 2: Teacher Ratings
  - Teachers complete the Critical Events Index (CEI) and the Combined Frequency Index (CFI) for the 6 students
- CEI is a checklist of 33 high-intensity, low-frequency behaviors
  - Teachers record any listed behavior within last 6 months
  - Teachers have option of writing in two serious behaviors not listed

SSBD Stage Two Rating for Externalizing Students

Critical Events Index

Date _____ Teacher _____ School _____

Student _____ Sex _____ Grade _____

Check one: Stage One SSBD Rank: ☐ 1   ☐ 2   or   ☐ 3

INSTRUCTIONS: Check **each** behavior from the list below that you are aware the student has exhibited during this school year.

_____ 1. Steals.

_____ 2. Sets fires.

_____ 3. Vomits after eating.

_____ 4. Has tantrums.

_____ 5. Physically assaults an adult.

_____ 6. Exhibits painful shyness.

_____ 7. Exhibits large weight loss or gain over past three months. (Significant weight fluctuation would be in excess of 20% change in body weight.)

_____ 8. Exhibits sad affect, depression, and feelings of worthlessness to such an extent as to interfere with normal peer and classroom activities.

_____ 9. Is physically aggressive with other students or adults (hits, bites, chokes, or throws things).

_____ 10. Damages others' property (academic materials, personal possessions).

_____ 11. Demonstrates obsessive-compulsive behaviors. (Student cannot get his/her mind off certain thoughts or obsessions.)

_____ 12. Reports having nightmares or significant sleep disturbances.

_____ 13. Engages in inappropriate sexual behaviors (masturbation, exhibitionism).

Yet "teacher nomination" procedures have increasingly been critiqued as a UA technique

 Teachers often under-refer for internalizing

- **School-based service utilization among urban children with early onset educational and mental health problems: The squeaky wheel phenomenon**. Bradshaw, C. P., Buckley, J. A., & Ialongo, N. S. (2008). *School Psychology Quarterly*, *23*(2), 169–186.

- **Influences on teacher referral of children to mental health services gender, severity, and internalizing versus externalizing problems**. Pearcy, M. T., Clopton, J. R., & Pope, A. W. (1993) *Journal of Emotional and Behavioral Disorders, 1*(3), 165–169.

Multiple Gating/ Teacher Nomination: same problem

- **Accuracy of Teachers in Identifying Elementary School Students who Report At-Risk Levels of Anxiety and Depression**. Cunningham & Suldo. School Mental Health (2014).

- findings suggest teachers can identify approximately half of children who experience at-risk levels of depression and anxiety (40-50%)

- substantial miss rates call into question this method for use as either an alternative to universal screenings or as an initial step (gatekeeper role) in a multi-modal identification process.

Limited research using teacher identification to identify internalizing students

Accuracy of Teachers in Identifying Elementary School Students Who Report At-Risk Levels of Anxiety and Depression (Cunningham & Suldo, 2014)

- 200+ elementary aged students, rated themselves using the CDI & MASC
- Teachers nominated three students from class lists

	Sensitivity	Specificity	Positive Predictive Value	Negative Predictive Value
Depression	50%	83.8%	23.9%	94.3%
Anxiety	40.7%	82.5%	22.9%	91.6%

A Comparison of Systematic Screening Tools for Emotional and Behavioral Disorders

Lane, et al., 2009

Early identification of students who might develop emotional and behavioral disorders (EBD) is essential in preventing negative outcomes. Systematic screening tools are available for identifying elementary-age students with EBD, including the *Systematic Screening for Behavior Disorders* (SSBD) and the *Student Risk Screening Scale* (SRSS). The SSBD is considered the gold standard for systematic EBD screening. The brevity of the SRSS is often favored with respect to resource allocation. The authors evaluated the concurrent validity of the SRSS to predict SSBD results when used to detect school children with externalizing or internalizing behavior concerns. Between low- and high-risk categories, the SRSS had excellent accuracy for predicting both externalizing (95%) and internalizing (93%) problems on the SSBD. Sensitivity (94%) and specificity (95%) were both excellent for externalizing behavior, but for internalizing behavior, sensitivity was lower (44%), while specificity was excellent (95%). Receiver-operating characteristic analysis also suggested that the SRSS was more accurate for detecting externalizing than internalizing behaviors. Limitations and future directions are offered.

A Comparison of Systematic Screening Tools for Emotional and Behavioral Disorders

Lane, et al.

Table 3
Conditional Probabilities, κ Agreement, and ROC Areas for Brief SRSS Predicting the "Gold Standard" SSBD

Target	SRSS Comparison	Conditional Probabilities						κ Agreement			ROC
		PPP	NPP	Sensitivity	Specificity	Accuracy	Prevalence	κ	ASE	95% CI	Area Under the Curve (AUC)
Externalizing											.952*
	Low × High	60.42%	99.46%	93.55%	95.09%	94.74%	7.42%	.7078	.0597	.5908 to .8249	
	Low × Moderate	7.83%	99.46%	81.82%	77.64%	77.73%	2.27%	.1058	.0357	.0359 to .1757	
	Low × Moderate + High	23.31%	99.46%	95.00%	74.65%	76.17%	7.50%	.2887	.0394	.2114 to .3659	
Internalizing											.802*
	Low × High	29.63%	97.35%	44.44%	95.09%	92.84%	4.44%	.3192	.0943	.1345 to .5040	
	Low × Moderate	9.40%	97.35%	52.38%	77.64%	76.57%	4.24%	.0943	.0386	.0186 to .1699	
	Low × Moderate + High	13.19%	97.35%	65.52%	74.65%	74.14%	5.56%	.1401	.0379	.0658 to .2145	

Note: ROC = receiver-operating characteristic; SRSS = *Student Risk Screening Scale*; SSBD = *Systematic Screening for Behavior Disorders*; PPP = positive predictive power; NPP = negative predictive power; ASE = asymmetric standard error; CI = confidence interval.
Tests of significance from logistic regression: *$p < .0001$, treating SRSS scores continuously.

FURTHER VALIDATION OF THE SYSTEMATIC SCREENING FOR BEHAVIOR DISORDERS IN MIDDLE AND JUNIOR HIGH SCHOOL

Richardson, et al. 2009. Psychology in the schools

Table 5
Correlations Between Systematic Screening for Behavior Disorders Stage Two and Other Teacher Rating Scales, ODR, and GPA

	ASEBA TRF Int.	ASEBA TRF Ext.	SSRS Int.	SSRS Ext.	GPA	ODR Dis.	ODR Att.
Critical Events Internalizing	0.38	−0.11	0.44	−0.17	0.17	−0.36	0.05
Critical Events Externalizing	0.10	0.41	−0.07	0.43	−0.30	0.31	−0.11
Adaptive	−0.28	−0.37	−0.16	−0.33	0.39	−0.38	−0.12
Maladaptive	0.03	0.21	−0.12	0.25	−0.20	0.28	−0.10

Notes. N(ASEBA, SSRS) = 59; N(GPA, ODR) = 66. ODR = office disciplinary referrals; ODR dis. = disorderly conduct office disciplinary referrals; ODR att. = attendance office disciplinary referrals; GPA = grade point average.

Development of the New Gold Standard

- The new gold standard will need
  - New/different model for test development
  - CBM like characteristics

- Example: **The Behavior Intervention Monitoring and Assessment System-second edition (BIMAS-2)**

without Innovation we cannot advance

# Dr. Scott Meier- The "Edison" of change sensitivity

- Meier (1997, 1998) developed <u>Intervention Item Selection Rules (IISRs)</u> designed to identify intervention-sensitive items
- He considered test items as differing along a trait-state continuum, and
- So different test construction procedures are necessary to select items sensitive to results of psychosocial interventions.
- Intervention-sensitive items should change in to response to an intervention and remain stable over time when no intervention is present
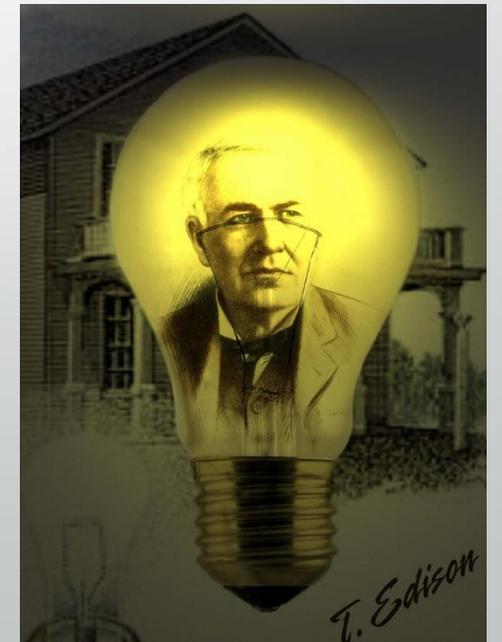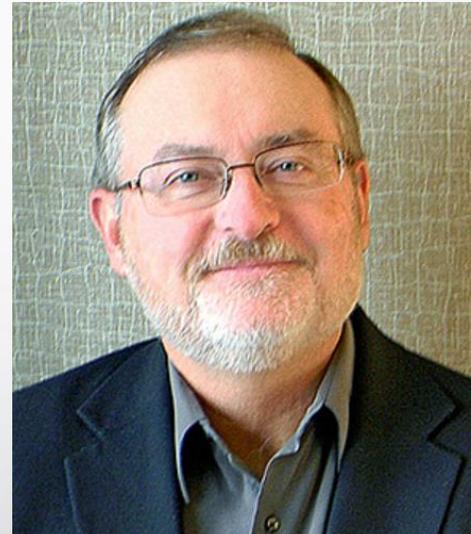
Meier on change sensitivity

- Creating change sensitive measures
- Intervention Item Selection Rules
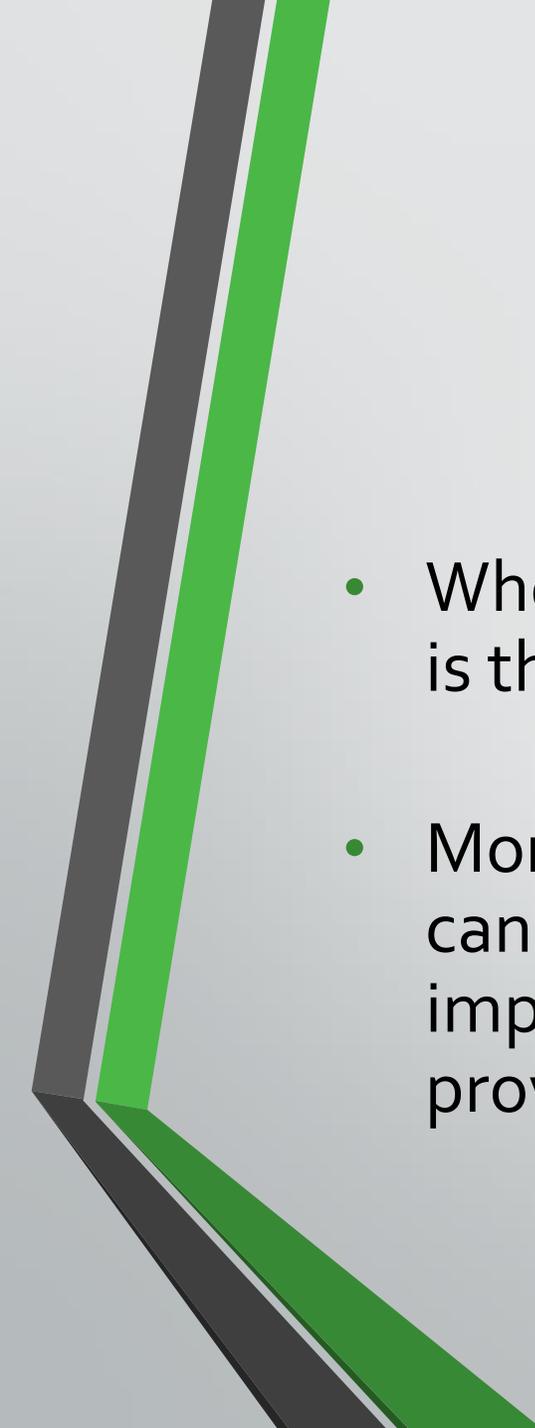- Now you get the "Edison" thing
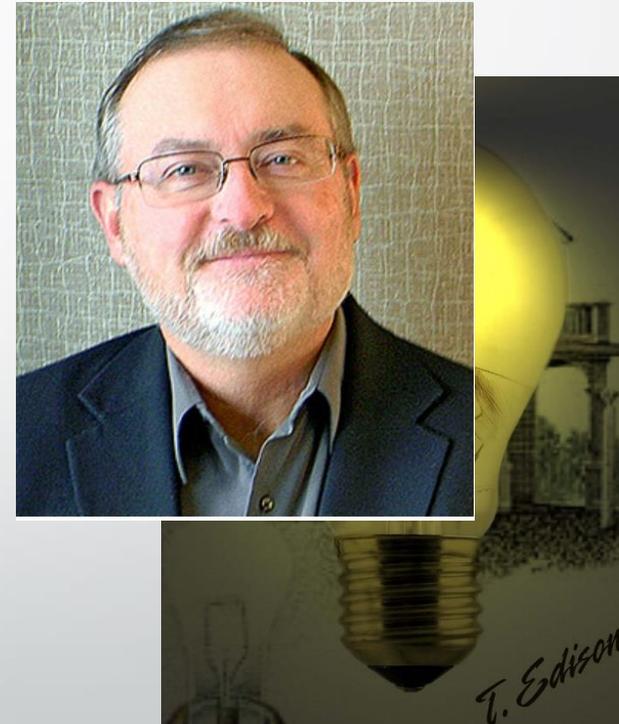
Meier: Progress Monitoring and Outcome Assessment

- Examine student performance frequently, over time, to evaluate response to instruction and intervention (RtI2).
- Produces clinical data for feedback about client progress during intervention
- Also used for outcome assessment, produces data about the amount and type of change from the start to the end of therapy (Meier, 2014).

SCOTT T. MEIER

Incorporating Progress Monitoring and Outcome Assessment into Counseling and Psychotherapy

A PRIMER

OXFORD
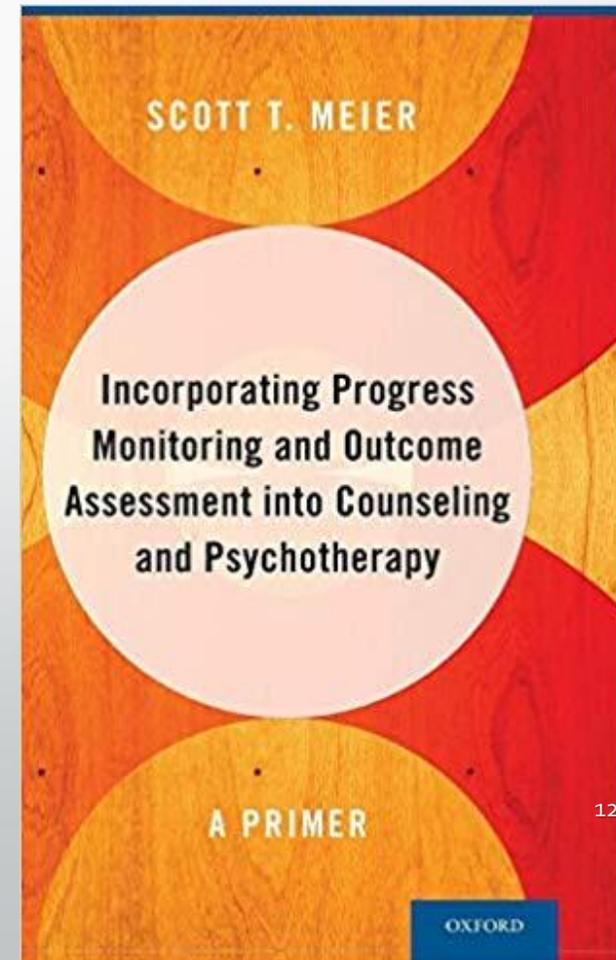
12/5/2019

Feedback Improves Outcomes

- When used appropriately, the primary benefit of PM measures is the feedback they provide about clinical progress

- More specifically, research has documented that PM measures can identify child and adolescent clients who are failing to improve or worsening, allowing clinicians to reconsider the provided interventions in the light of possible treatment failure

MTSS Measures: Important Considerations

Important Questions:

- Does the measure assess strengths and risk?
- Can it inform intervention design (consider the scales included)?
- Is it useful for Screening **and** Progress Monitoring (consider how the test was developed- traditional vs. change sensitive)?
- Is it useful for evaluation- can it be used to assess interventions in tiers 1-3, across ages, settings, raters, and programs?
- Most importantly- is it technically adequate for UA and PM? See Psychometric Slide earlier.
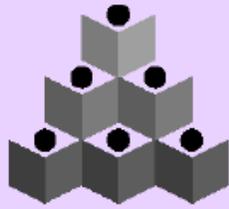
12/5/2019

Response to Intervention and School-wide Positive Behavior Support

- Horner; Q & A Document.
- **For Universal Screening** we use the SSBD for elementary schools (see work of Lucille Eber in Illinois), but basically rely on ODRs and teacher reports at middle and high school. **If 2–3 times a year your teachers nominate students who engage in behavior that is a barrier to their social and/or academic achievement you will identify most kids needing early support.**
- **But is this really the case?**

INTRODUCING THE

BIMAS2™
Behavior Intervention
Monitoring Assessment System

www.BIMAS2.com

By James L. McDougal, Psy. D., Achilles N. Bardos, Ph.D., & Scott T. Meier, Ph.D.

Three authors coming together from three different perspectives

James L. McDougal

Achilles N. Bardos

Scott T. Meier

The BIMAS is a multi-informant web-based delivered assessment system

- RATINGS available for:
  - Parents
  - Teacher
  - Self (12 -18 yrs old)
  - Clinician

- Grades pre-K to 12
- Secure server platform
- Reports tailored to MTSS tiers
- Assessment results are immediately available

BIMAS (standard) OVERVIEW

BEHAVIORAL CONCERN SCALES			ADAPTIVE SCALES	
Conduct	Negative Affect	Cognitive/Attention	Social	Academic Functioning
anger management problems, bullying behaviors, substance abuse, deviance	anxiety, depression	attention, focus, memory, planning, organization	social functioning, friendship maintenance, communication	academic performance, attendance, ability to follow directions

Bimas overview

| BIMAS Scales	*T*-score	Scale Descriptors
Behavioral Concern Scales	*T* = 70+	High Risk
	T = 60-69	Some Risk
	T = 60 or less	Low Risk
Adaptive Scales	*T* = 40 or less	Concern
	T = 41-59	Typical
	T = 60+	Strength

BIMAS-2 (standard)

- 34 items

- Assesses behavioral concerns and adaptive functioning.

- Multiple Raters

- Normed for screening, shown to be change sensitive for PM

- On-line/ sever based

- Variety of reports across tiers for use by MTSS

11/7/2019

Large Normative Sample
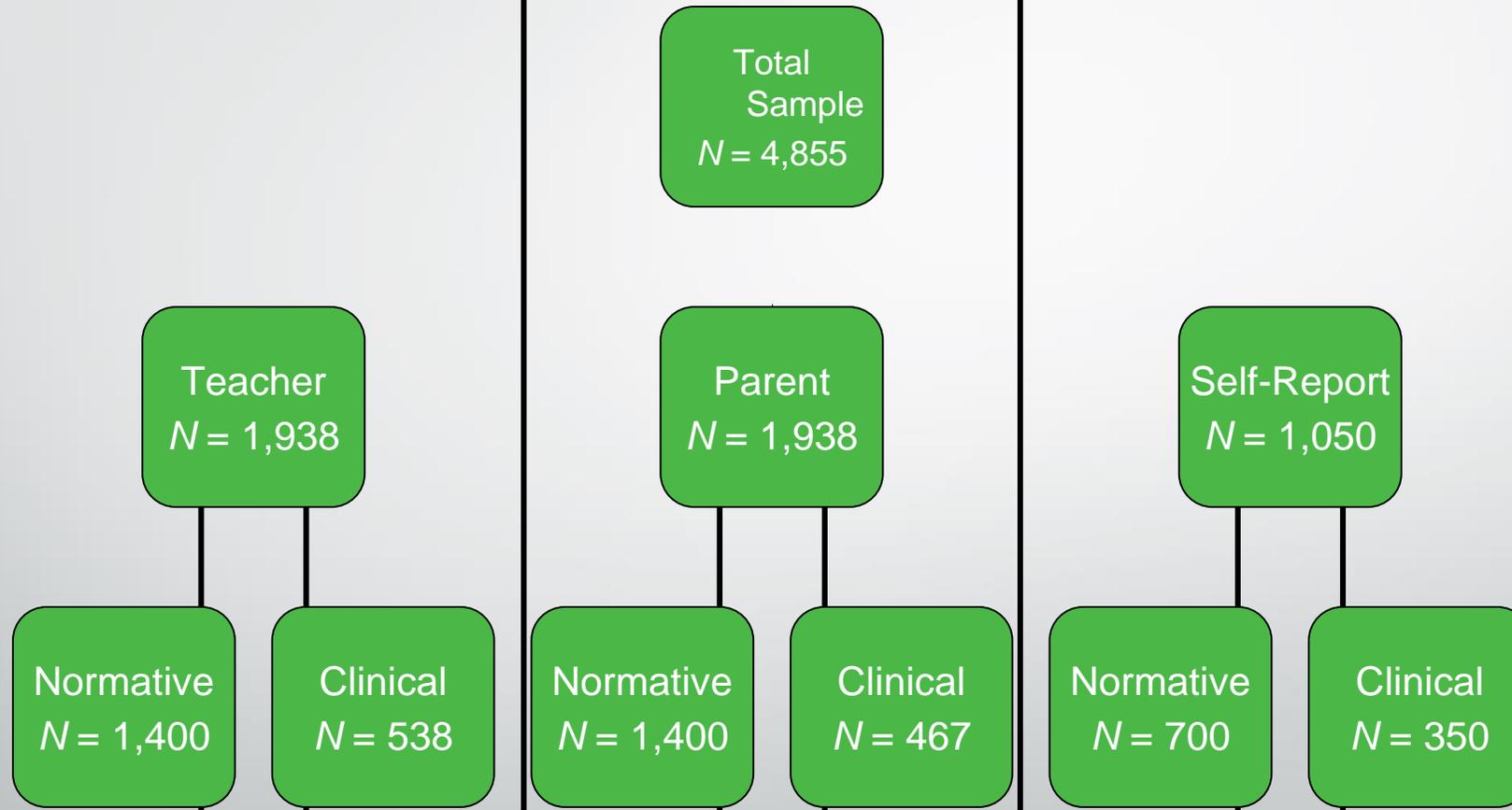
Classification Accuracy of BIMAS–Teacher Scales

Classification Accuracy Statistic	Full Range of Scores	Cut-Scores
Overall Correct Classification	**85.2%**	**82.5%**
Sensitivity	**83.5%**	**80.1%**
Specificity	**85.8%**	**83.4%**
Positive Predictive Power	**68.4%**	**64.9%**
Negative Predictive Power	**93.4%**	**91.6%**

SO how does the BIMAS2 compare to the "Gold Standard?"

- Pilot studies in the schools

- Compared BIMAS2 Ratings and SSBD nominations

- BIMAS2 used as the criterion measure because it is normed and has known classification stats.

11/7/2019
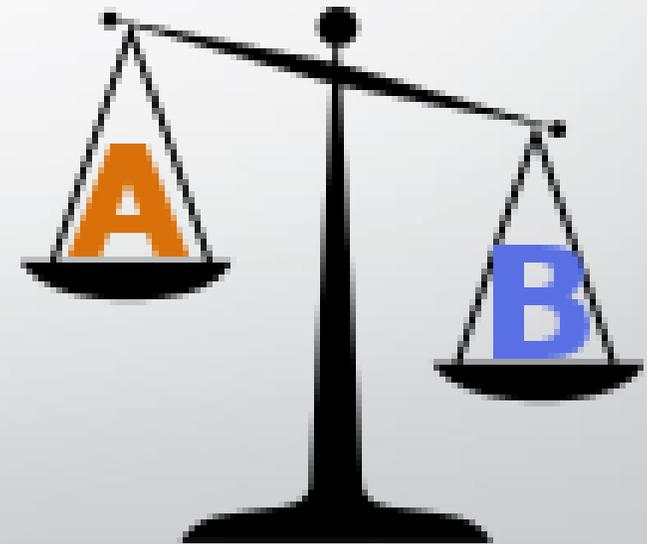
Replication Study: SSBD and BIMAS2

- **2 Elementary Schools**

- **Suburban District, predominately Caucasion**

- **Grades K-5**

- **45 teachers**

- **Total student n= 1012**

<u>**What we asked teachers to do: modified SSBD Gate 1**</u>

Step 1: Teachers completed the BIMAS-2 standard form on their entire class

Step 2: Teachers were provided a class list, given a definition for externalizing behavior and internalizing behavior, and then asked to identify three students (SSBD) in each category.

Step 3: Teachers were asked to rank order the top three students

Results- Comparison of BIMAS2 and SSBD Identifications

Externalizing Composite: Yellow level students

"At-risk" Students BIMAS T score 60-69		BIMAS		
		At-risk	Not at-risk	Total
SSBD	At-risk	77	53	130
	Not at-risk	60	822	882
	Total	137	875	1012

Results- Comparison of BIMAS2 and SSBD Identifications

Externalizing Composite: Red level students

"High Risk" Students BIMAS T score 70 & up		BIMAS		
		At-risk	Not at-risk	Total
SSBD	At-risk	32	98	130
	Not at-risk	5	877	882
	Total	37	975	1012

Results- Comparison of BIMAS2 and SSBD Identifications

Internalizing Composite: Yellow level students

"At-risk" Students BIMAS T score 60-69		BIMAS		
		At-risk	Not at-risk	Total
SSBD	At-risk	59	68	127
	Not at-risk	114	771	885
	Total	173	839	1012

Results- Comparison of BIMAS2 and SSBD Identifications

Internalizing Composite: Red level students

"High Risk" Students BIMAS T score 70 & up		BIMAS		
		At-risk	Not at-risk	Total
SSBD	At-risk	20	107	127
	Not at-risk	22	863	885
	Total	42	970	1012

Comparison of BIMAS2 and SSBD Identifications

Classification Stats for the SSBD using BIMAS2 as the Criterion measure

Externalizing	"At-Risk"	Clinical
Sensitivity	.56	.86
Specificity	.94	.90
Efficiency	89%	90%
Positive Predictive Power	59%	25%
Negative Predictive Power	93%	99%
False Negative	6%	10%
False Positive	44%	14%

Internalizing	"At-Risk"	Clinical
Sensitivity	.34	.48
Specificity	.92	.89
Efficiency	82%	87%
Positive Predictive Power	46%	16%
Negative Predictive Power	87%	98%
False Negative	8%	11%
False Positive	66%	52%

Discussion and Limitations

- Current findings indicate high level of agreement between SSBD and BIMAS-2 in regard to externalizing behavior
  Sensitivity- Some risk .56, Clinical: .86

- Findings low level of agreement between SSBD and BIMAS-2 for internalizing
  Sensitivity- Some risk: .34, Clinical: .48

- SSBD has commonly been referred to as the "**gold standard**" for behavioral screening; does ok with externalizing, but internalizing- not so much

- SSBD's low sensitivity for students in the some risk category is also a concern (think early intervention)

- Difficulties with Multiple gating procedures

  - Only students nominated for gate 1 get further assessment

  - Validation studies don't typical include classification stats for known clinical and typical students

  - Not suitable for progress monitoring

  - Doesn't appear to identify students in the "Yellow Range"- best time for intervention

Implications

National CDC youth risk Survey (2017) results indicate within the last 12 months;

- 31% of students felt hopeless

- 17-19% seriously considered suicide

- 14-15% developed a plan

- 7% attempted suicide- in a high school of 1000 students that's 70!

Why is this concerning?

- MG methods under-identify students at risk for/suffering from internalizing problems

- Suicide is the 3rd leading cause of death for adolescents

- Each suicide increases risk for others

- Universal screening is time consuming but compare it to suicide response.

What we've learned recently: BIMAS2 item 24 notifications

Chalkbeat
Education news. In context.

Locations   Topics   Connect   About Us   Jobs Board   NEWSLETTERS   DONATE

'It's OK to not be OK:' How one high school saved lives with a 34-question survey

BY ANN SCHIMKE · 23 HOURS AGO

...ooms around the building, the school's ninth-graders whizzed through an ...nental health survey that would soon deliver real-time data to the group in the ...nce room. They were a triage team of sorts — particularly interested in the ...s to question 24, which asked how often students had had thoughts of hurting ...ves within the past week.

The overarching message to students, said Jamie Murray, a district psychologist who helped coordinate the effort, was "It's OK to not be OK."
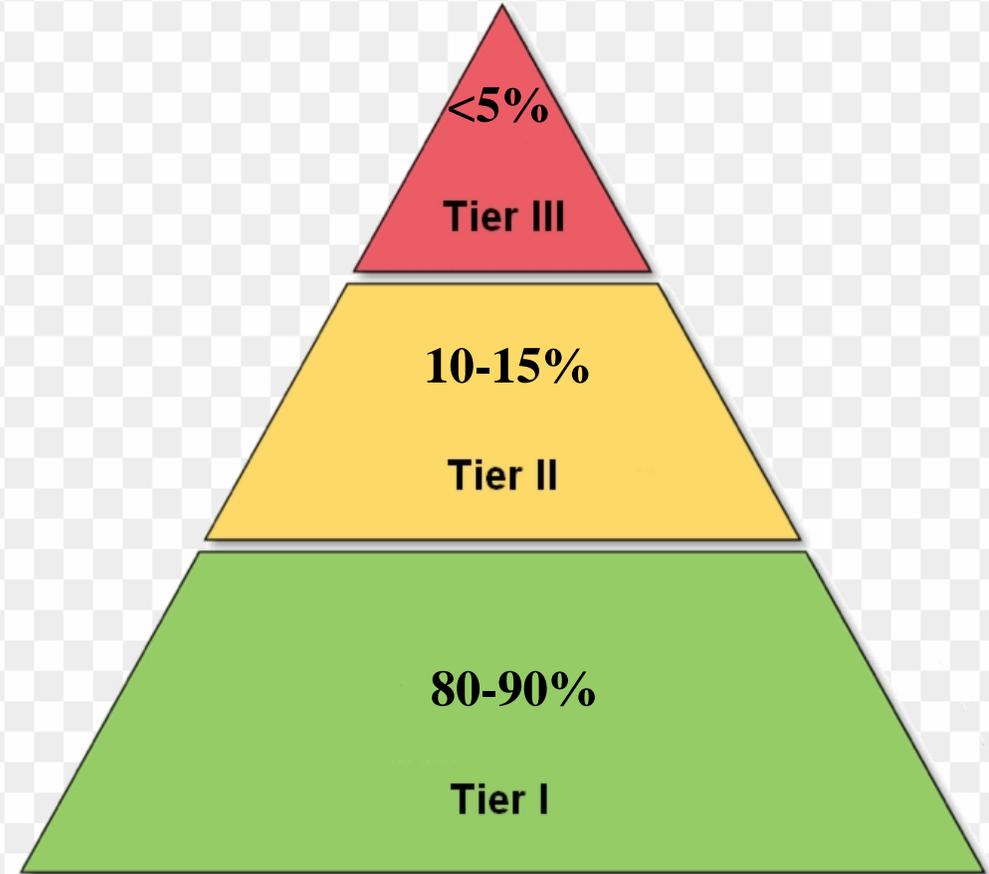
FACEBOOK   TWITTER   EMAIL

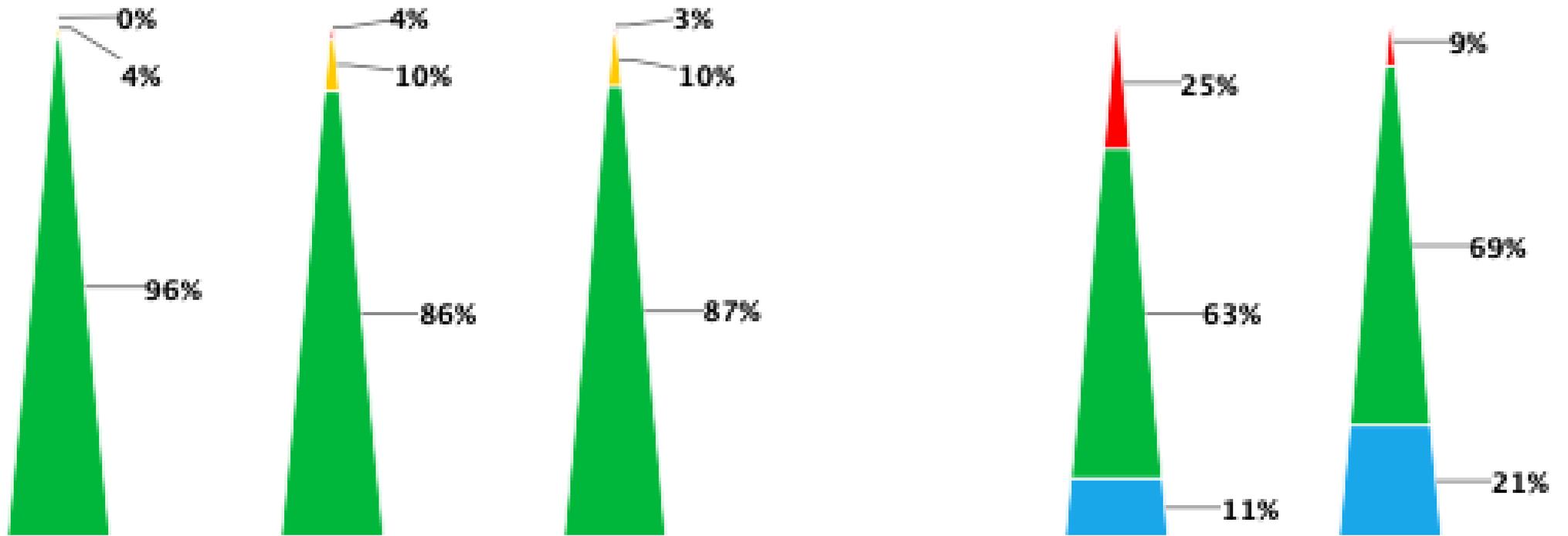# FALL RESULTS: CCHS

TEACHER REPORTS

- 993 Teacher Reports Completed
- Risk areas are parallel to MTSS Triangle
  - 80-90% Green (Tier I)
  - 10-15% Yellow (Tier II)
  - <5% Red (Tier III)

MTSS Triangle:
- Tier III — <5%
- Tier II — 10-15%
- Tier I — 80-90%

Levels Of Risk	Conduct	Negative Affect	Cognitive/ Attention	Levels Of Functioning	Social	Academic Functioning
High Risk	3 (0%)	42 (4%)	33 (3%)	Concern	252 (25%)	94 (9%)
Some Risk	37 (4%)	100 (10%)	99 (10%)	Typical	630 (63%)	687 (69%)
Low Risk	953 (96%)	851 (86%)	861 (87%)	Strength	111 (11%)	212 (21%)
Total	993 (100%)	993 (100%)	993 (100%)	Total	993 (100%)	993 (100%)
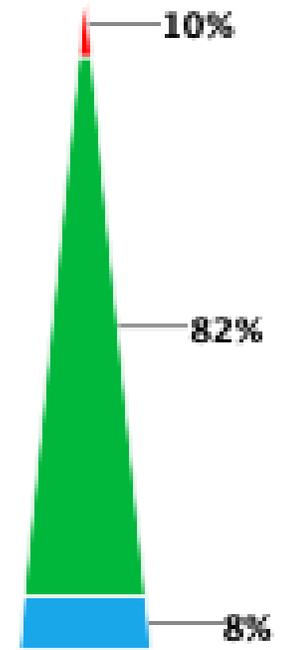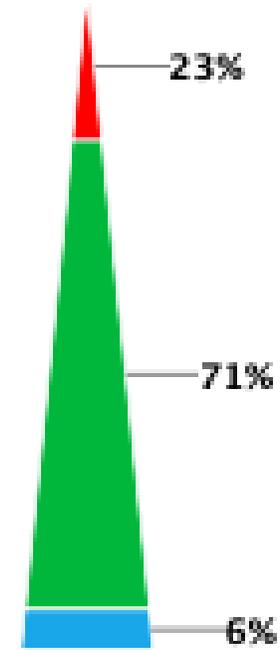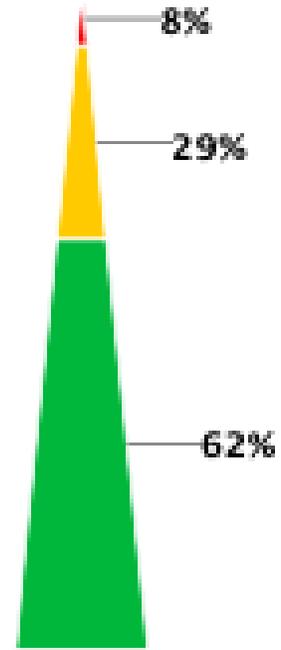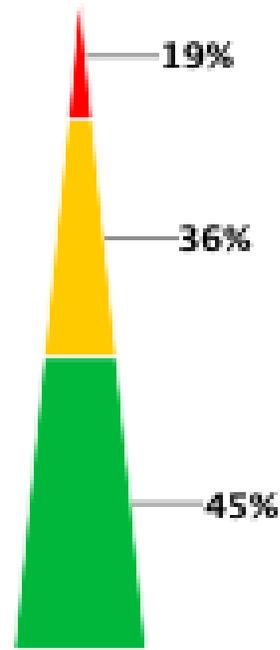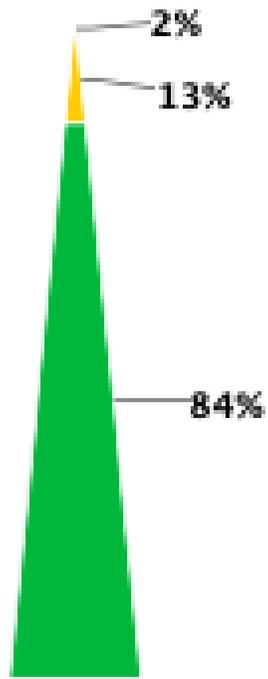
Levels Of Risk	Conduct	Negative Affect	Cognitive/ Attention	Levels Of Functioning	Social	Academic Functioning
High Risk	20 (2%)	162 (19%)	68 (8%)	Concern	187 (23%)	82 (10%)
Some Risk	109 (13%)	299 (36%)	244 (29%)	Typical	592 (71%)	681 (82%)
Low Risk	702 (84%)	370 (45%)	519 (62%)	Strength	52 (6%)	68 (8%)
Total	831 (100%)	831 (100%)	831 (100%)	Total	831 (100%)	831 (100%)

BIMAS2 Canon City High School
Question #24 Data Analysis by Grade and Frequency (2018/19)

9th Grade	Total Endorsement	Percentage	1: Rarely 1-2 times Minimal Extent	2:Sometimes 2-3 times Moderate Extent	3: Often 5-6 times Significant Extent	4: Very Often 7 or greater Extreme Extent
Fall 2018	229	74/229=32%	36	19	11	8
Spring 2019	220	55/220=25%	32	17	5	1

10th Grade	Total Endorsement	Percentage	1: Rarely 1-2 times Minimal Extent	2:Sometimes 2-3 times Moderate Extent	3: Often 5-6 times Significant Extent	4: Very Often 7 or greater Extreme Extent
Fall 2018	239	54/239=23%	22	20	9	3
Spring 2019	247	48/247=21%	20	14	9	5

11th Grade	Total Endorsement	Percentage	1: Rarely 1-2 times Minimal Extent	2:Sometimes 2-3 times Moderate Extent	3: Often 5-6 times Significant Extent	4: Very Often 7 or greater Extreme Extent
Fall 2018	187	50/187=27%	23	17	7	3
Spring 2019	192	37/192=19%	23	9	2	3

12th Grade	Total Endorsement	Percentage	1: Rarely 1-2 times Minimal Extent	2:Sometimes 2-3 times Moderate Extent	3: Often 5-6 times Significant Extent	4: Very Often 7 or greater Extreme Extent
Fall 2018	177	57/177=31%	23	14	9	11
Spring 2019	148	26/148=18%	10	13	3	0

Fall: 236/832=28%
Spring: 143/807=18%

BIMAS2 Self-Injury Continuum Protocol

Protective Factors

*Ability to cope with stress or frustration

*Sense of responsibility to others

*Social Supports

*Has a reason to live

*Religious beliefs

*Positive therapeutic relationships

*Engaged in work or school

*Fear of death

*Cultural, spiritual or moral attitudes against suicide

Psychosocial Stressors

*Family history of suicide

*Previous suicide attempt(s)

*Mental health-clinical depression

*Substance abuse

*Feelings of hopelessness

*Impulsive or aggressive tendencies

*Cultural and religious beliefs that suicide is a noble resolution

*Isolation, a feeling of being cut off from other people

*Barriers to accessing mental health treatment

*Loss (relational, social, work, or financial)

*Physical illness

*Easy access to lethal methods

Student shows signs and symptoms

Disclosure to a peer of thoughts of self-injury

Self-disclosure (BIMAS2)

→ School becomes aware of concerns of self-injury

→ Point person interviews student in a calm and reassuring demeanor

No active self-injury & No thoughts of suicide

Active self-injury No thoughts of suicide

No active self-injury but has thoughts of suicide

Active self-injury & thoughts of suicide

No Risk

Administer self-injury screener

Administer Columbia suicide screener

If "Yes" on questions 6a & 6b

Identify school contact person & supports

Assess psycho-social stressors

Review at next BIMAS2 Screener

Determine Risk Level

Firearms: violence screening & re-entry meeting required

No concerns

Low Risk

Moderate Risk

High Risk

Crisis Services

Parent has option to:

- Mobile Crisis Services in school
- Parent opts to transport to Mental Health Agency

Parent signs Notification of Self-Injury

Upload to IC Mental Health tab

Mental Health Flag

Unable to reach Parent

Contact Parent

Contact Parent

Student not safe at home

Parent unable to be reached

Identify school contact person & supports

Assess psychosocial stressors

Consider student referral to mental health community agency

Upload to IC Mental Health Tab

Consider release of information

Complete Student Support Plan and/or Safe Plan w/ student & parent

Refer student to mental health community agency

Parent signs Notification of Self-injury

Upload to IC Mental Health tab

Release of Information

Contact DHS

SRO: Child welfare check

Mandatory Re-entry meeting to return to school. If no Mental Health safe plan is provided by mental health agency, move to the development of a school level Mental Health Safe Plan worksheet accompanies re-entry documentation

HOW WE ARE USING RESULTS?

- Intervening with high-risk students
- Increased school-based counseling services from community agencies
- Standardized referral process for counseling supports with a tracking system
- Training in nonsuicidal self-injury
- Updated Suicide protocols

- SHP-SEL Curriculum Delivery
- Assessing the need for a suicide prevention program
- MTSS/PLC meetings
- Psychoeducational groups on stress management, anxiety strategies, healthy relationships, coping mechanisms, mindfulness, etc.
- Mental Health School Campaign

CCHS Behavioral Health Supports

Intensive

FBA   BIP
CARE
IEP's and 504 Plans
Wrap Around Supports
Court Appointed Services
Community Based Services
Choice Points/ Cross Roads

1:1/Small Group Counseling

Threat Assessments/ Suicide Assessments
School-Based Mental Health Supports   Pre and Post Assessments
CBT, Anger Management   Social History Interview
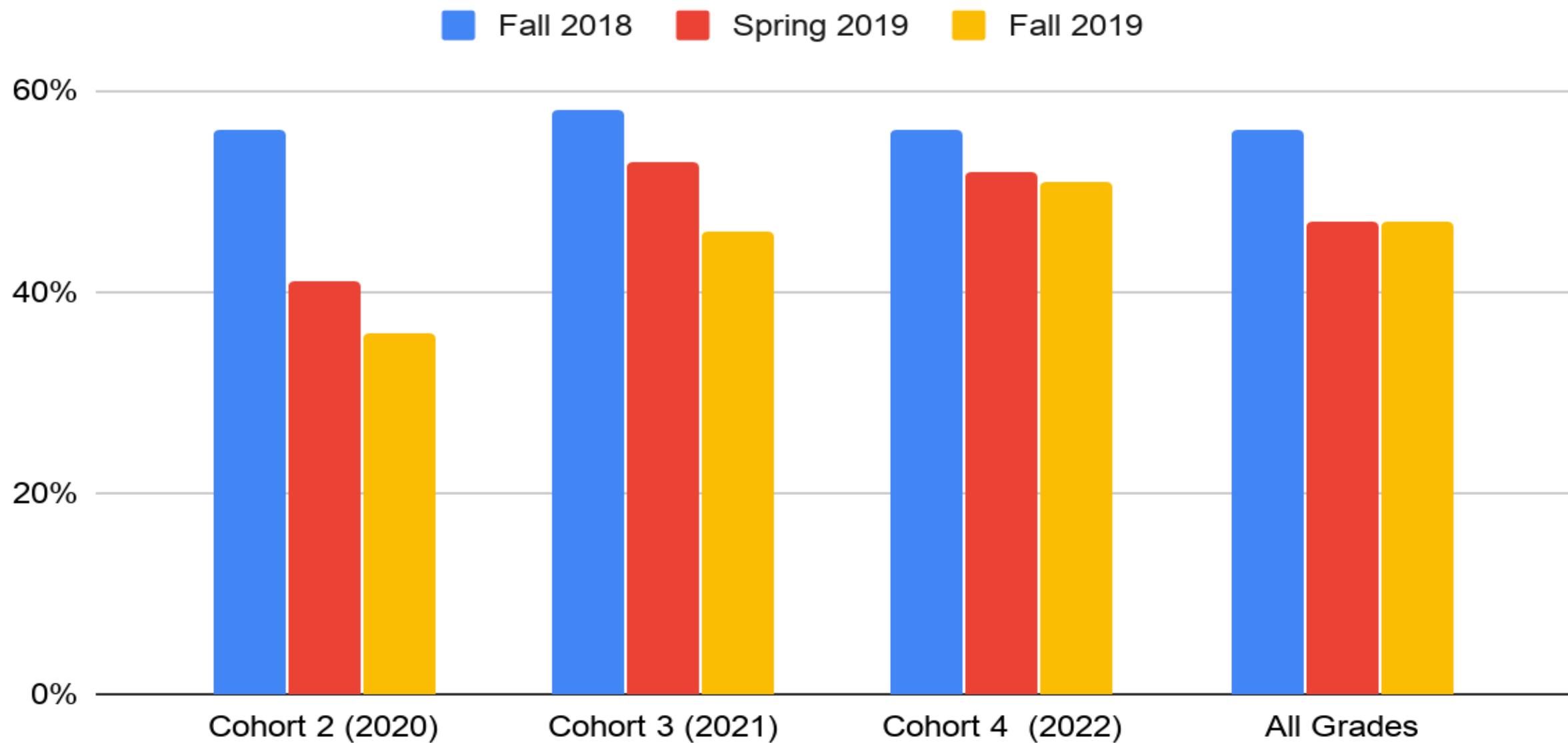Goal Setting-- Progress Monitoring

Targeted

Student Conduct Plan   Counseling
Student Behavior Contract
Motivational Interviewing   Small Group Intervention
IEP & 504 Plans
Check in, Check out   Educational plan (APAS)
Alternative Learning Environment (TOP)
Administrative Conference
Progress Monitoring   Wrap Around Supports

Reality-Choice Therapy
Mean Girls
7 Habits of Highly Effective Teens
Mindfulness   Why Try
Anger Replacement (PEACE)

Universal

SEL Curriculum
Mental Health First Aid   Task Force Professional Development
Trauma Informed Care   Sensory Opportunities   Student Work Sessions
Physical Outlets   Restorative Justice Discipline
Flexible Academic Routines
Proactive Behavior Modeling   Choices in Learning/Pathways
Alternative to Suspension
Tiger Link Crew   1:1 Technology   SEL Universal Screener

Random Acts of Kindness, Biotin Life Skills, 3R's

CCHS Negative Affect (60+) by Cohort - Student Report

Legend: Fall 2018, Spring 2019, Fall 2019

Categories: Cohort 2 (2020), Cohort 3 (2021), Cohort 4 (2022), All Grades

Student Self-Reports of High Risk Negative Affect or Self Harm Ideation

		Spring 2019		
		High Risk	Not High Risk	Total
Fall 2018	High Risk	39	73	112
	Not High Risk	40	538	578
	Total	79	611	690

There were 112 students who self-identified as high risk in the fall. Of those, 73 did not identify by the spring, a 65% reduction.

Reasons Students were Identified as High Risk

Student Ratings

Reason	N	%
T-score of 70 on Negative Affect Scale of BIMAS	85	57.4
Item 24 Score of 3 or 4	8	5.4
70 T-score and High Item 24	55	37.2
Total	148	

Fall 18: Teacher Ratings Compared to Student Self-Ratings

|		Student Eval		
		High Risk	Not High Risk	Total
Teacher Eval	High Risk	50	12	62
	Not High Risk	98	672	770
	Total	148	684	832

Sensitivity = 0.34 That is the proportion of students who self identified as high risk and were also identified as high risk by a teacher.

Student Self-Reports of High Risk Negative Affect or Self Harm Ideation when Criteria for NegAff Changed to T-Score of 70

		Spring 2019		
		High Risk	Not High Risk	Total
Fall 2018	High Risk	52	119	171
	Not High Risk	46	615	661
	Total	98	734	832

There were 171 students who self-identified as high risk in the fall. Of those 119 did not identify by the spring, a 70% reduction.

Using PBIS to Address the Needs of Students with Internalizing Problem Behavior
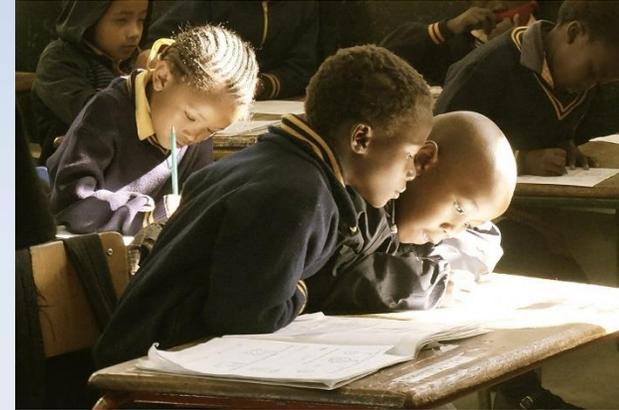
Mark Weist   University of South Carolina   WEIST@mailbox.sc.edu
Rob Horner   University of Oregon   robh@uoregon.edu
Lucille Eber   MW PBIS Network (IL)   lucille.eber@midwestpbis.org

PBIS: Systems for Enhancing Climate & Culture

2016 PBIS Leadership Forum | October 27-28, 2016 | Donald Stephens Convention Center, Rosemont, IL

C7: Mental Health Integrations
October 27,2016 | 2:15 – 3:30

Key Words: Alignment, Mental Health, Internalizing Problem Behavior

D11 – Incorporating Universal Screening to Enhance Data-based Decisions for Students with Internalizing Needs

Leader Presenters: Joni Splett and Lucille Eber
Exemplar: Dama Abshier

Key Words: Screening, Mental Health, Teams

Reference

- Weist, M.D., Eber, L., Horner, R., Splett, J., Putnam, R., Barrett, S., Perales, K., Fairchild, A.J., and Hoover, S. (2018). Improving multi-tiered systems of support for students with "internalizing" emotional/behavioral problems. *Journal of Positive Behavior Interventions, 20(3),*172-184.

Challenges to focus on Internalizing problems

- Less visible problems less likely to be focused on generally and especially in the very busy environment of schools
- Lack of Tier 1 examples
- Staff generally not trained or supported for effective identification and intervention with these youth

Youth with Externalizing vs Internalizing Challenges

	Received Mental Health Services	Received Special Education Services
Externalizing	85%	75%
Internalizing	65%	40%

Bradshaw, C. P., Buckley, J. A., & Ialongo, N. S. (2008). School-based service utilization among urban children with early onset educational and mental health problems: The squeaky wheel phenomenon. *School Psychology Quarterly*, 23(2), 169.

Distinguishing Internalizing from Externalizing Problems

- Externalizing problems are highly interactive and social
- By contrast, internalizing problems are notable for what they are not
- Social and academic "treading water" or "disappearing" while others are moving forward
- Examples: requesting to leave events, reduced participation in activities, poor completion of work, frequent trips to the school nurse , withdrawal from peer interaction

Reducing the Likelihood of Early Identification/Intervention

- A percentage of students with internalizing problems use academic achievement as a coping mechanism; hence, are doing "well" and are even less likely to be identified and offered support/help

Seligman (1974) – Learned Helplessness

- Internalizing behavior the result of multiple failed attempts to achieve social outcomes in appropriate ways, results in withdrawal, avoidance and an increase in self-delivered negative messages (e.g., "I can't do this")
- Contributes to self-fulfilling prophecies and negative spiraling

Mapping PBIS and SMH

State of the Carolinas: Implementing School Mental Health and Positive Behavioral Interventions and Supports

by Joni W. Splett, Kurt D. Michael, Christina Minard, Robert Stevens, Louise Johnson, Heather Reynolds, Katharina Farber, and Mark D. Weist*

The Carolinas have a rich and diverse history. South Carolina was the first colony to declare independence from British rule during the American Revolution and the first state to declare secession from the Union at the start of the Civil War. The population of South Carolina is nearly 4.8 million. It is the 24th most populous state in the United States and has a diverse citizenry, including 64% Caucasian, 28% African-American, and 5% Hispanic residents (U.S. Census Bureau, 2012). Children and youth under the age of 18 make up 22.8% (1.08 mil...

a large number (25.8%) of North Carolina's children live in poverty (Annie E. Casey Foundation & O'Hare, 2013).

Equally unfortunate, a high percentage of children attending public schools in the Carolinas perform below state standards. For example, in South Carolina, the number of children who perform below state standards in reading (17% in 3rd grade; 32% in 8th) and math (30% in 3rd grade; 30% in 8th) is substantial, and in North Carolina, the situation is considerably worse, with below-standard scores in reading at 65% in...

of Mental Health (SCDMH) has one of the strongest expanded school mental health (SMH) service programs nationally, and the grassroots effort to disseminate and support implementation of Positive Behavioral Interventions and Supports (PBIS) is benefiting from recent interest, renewed energy, and federal momentum.
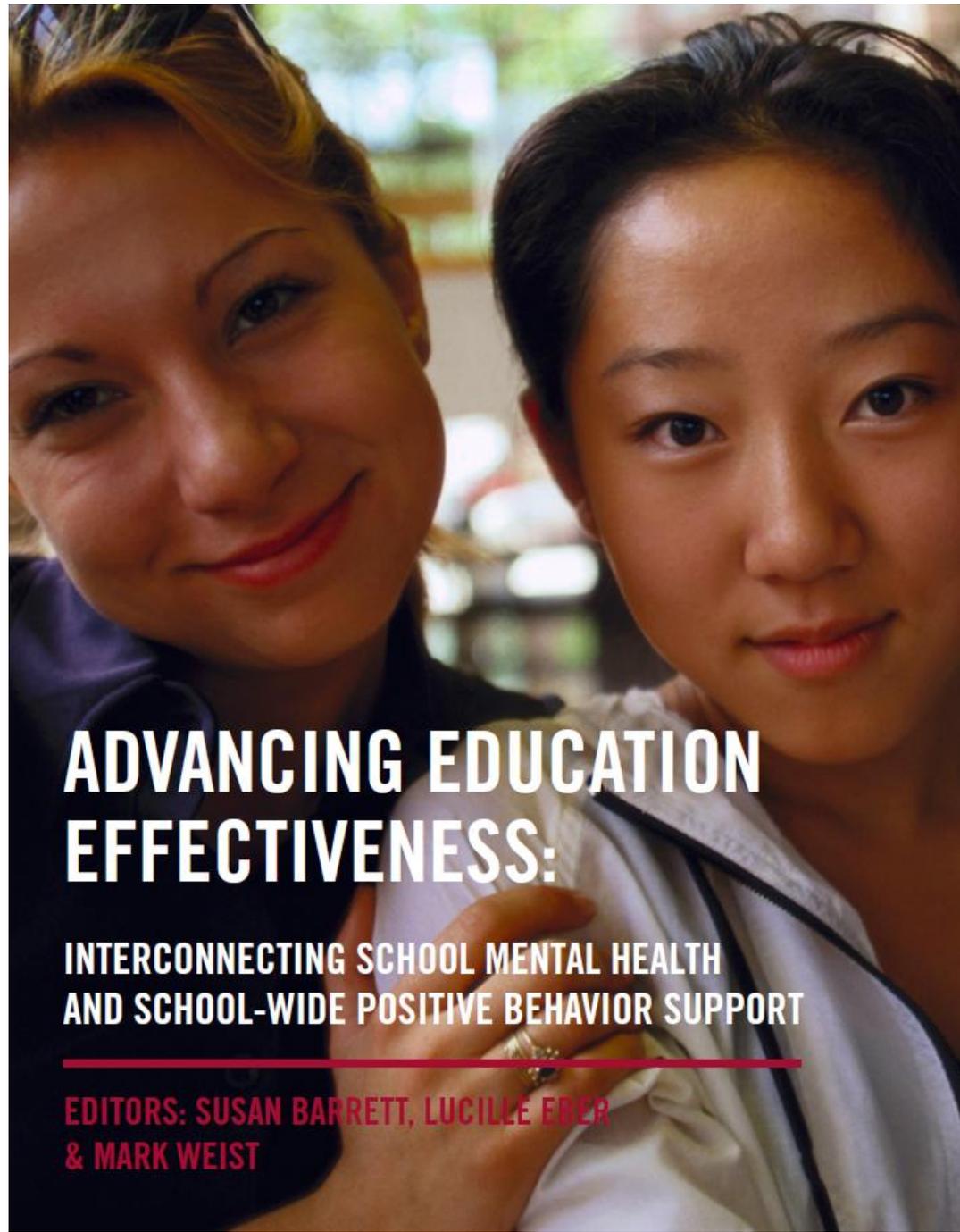
The Interconnected Systems Framework

The trends in the Carolinas mirror national trends in children's educational and men...

Key Rationale

- PBIS and SMH systems are operating separately
- Results in ad hoc, disorganized delivery of SMH and contributes to lack of depth in programs at Tiers 2 and 3 for PBIS
- By joining together synergies are unleashed and the likelihood of achieving depth and quality in programs at all three tiers is greatly enhanced

ADVANCING EDUCATION EFFECTIVENESS:

INTERCONNECTING SCHOOL MENTAL HEALTH AND SCHOOL-WIDE POSITIVE BEHAVIOR SUPPORT

EDITORS: SUSAN BARRETT, LUCILLE EBER
& MARK WEIST

Interconnected Systems Framework (ISF) Defined

– <u>Structure</u> and <u>process</u> for education and mental health systems to interact in most effective and efficient way

– Guided by <u>key stakeholders</u> in education and mental health/community systems, including youth and families

– Who have the <u>authority</u> to reallocate resources, change roles and functions of staff, and change policy

ISF Defined 2

– A strong, committed and functional team guides the work, using data at three tiers of intervention

– Sub-teams having "conversations" and conducting planning at each tier

– Evidence-based practices and programs are integrated at each tier, with implementation support and coaching

– SYMMETRY IN PROCESSES AT STATE, DISTRICT AND BUILDING LEVELS

ISF Enhances MTSS Core Features

- **Effective teams** that include community mental health providers
- **Data**-based decision making that include school data beyond ODRs and community data
- Formal processes for the selection & implementation of **evidence-based practices** (EBP) across tiers with team decision making
- **Early access** through use of comprehensive screening, which includes internalizing and externalizing needs
- Rigorous **progress-monitoring** for both fidelity & effectiveness of all interventions regardless of who delivers
- Ongoing **coaching** at both the systems & practices level for both school and community employed professionals

Thanks to Funder and Disclaimer

STUDY DESIGN

- 24 Participating Elementary Schools
  - Charleston, SC (12)
  - Ocala, FL (12)
  - Prior to study all were implementing PBIS; none were implementing SMH
- Each school is randomized to one of three conditions
  - PBIS Only
  - PBIS + SMH (business as usual)
  - Interconnected Systems Framework (ISF)
- Intervention (ISF) in place for 2 academic years
- All students in the building are participants unless they opt of study

Data-Based Decision Making

Do your data capture internalizing concerns?

Do your teams have capacity to plan/monitor interventions for internalizing concerns?

UPDATE COMING SOON!!

AWARE — Advancing Wellness and Resiliency in Education

A Sample of Broadband, Empirically-Developed Screening Instruments

Below is a sample of instruments that were (a) developed for the purpose of screening, (b) validated with large samples of children, (c) and are broadband, or assess a range of social-emotional indicators.

Instrument	Authors	Who to screen?				What to screen?						Who completes it?				How feasible and practical is the use of the instrument?										How do you access the instrument?	
		Preschool	Elementary (K-5)	Middle (6-8) / High (9-12)	Internalizing/Emotional Problems	Externalizing/Conduct Problems	Social Problems	Academic Problems	Adaptive Behavior/Strengths		Parent	Teacher	Youth	Spanish	Other Languages	Initial Expense	Cost	Annual Subscription	Number of Items	Time to Complete (Minutes)	Flex-Monitoring	Intervention	Online Scoring	Online Database	Software	Publisher	Website
BASC-3 BESS	Reynolds & Kamphaus	✔	✔	✔	○	○		○	○		✔	✔	✔			$247-321	$1.25/use	$170-256	19-30	5-10/S	✔	✔ (+$)	Review360	Review360		Pearson	http://bit.ly/1Rsev7k
BIMAS	McDougal, Bardos, & Meier		✔	✔	◉	◉	◉	◉	◉		✔	✔	NR	NR		$99	$2-4/child	N/A	34	5-10/S	✔	NR	✔	✔		MHS	http://bit.ly/JxTkF4
DESSA-Mini	Naglieri, LeBuffe, & Shapiro		✔	✔			○		○		✔		✔			$105	$0.64/use	$2.50/child	32	5-10/S		✔	✔	✔		Apperson	http://bit.ly/1QVGcLr
SAEBRS	Kilgus et al.		✔	✔	◉		◉	◉	○		✔					Free	Free	$6/child	19	1-3/S		NR	✔	✔		FastBridge	http://bit.ly/1OTYR2F
SDQ	Goodman	✔	✔	✔	◉	◉	◉		◉		✔	✔	✔	✔		Free	Free	N/A	25	5-10/S		NR	✔		✔		http://www.sdqinfo.com/
SEARS-Short	Merrell		✔	✔					◉		✔	✔	✔			$59	$.92/use	N/A	12	3-5/S		NR			✔	PAR	http://bit.ly/1RuMy4B
SEHS	Furlong		✔	✔					◉			✔	✔	✔		Free	Free	N/A	20-36	5-10/S		NR					http://bit.ly/1Twfz04
SIBS & SEBS	Cook, Volpe, & Gresham		✔		○	○					✔					Free	Free	N/A	14	10-20/C		NR	Review360	Review360		Pearson	
SRSS-IE	Drummond; Lane et al.		✔	✔	○	○					✔					Free	Free	N/A	12	10-20/C		NR					http://bit.ly/1UVjYZQ
SSIS-PSG	Elliott & Gresham	✔	✔	✔				◉	◉		✔					$116	$47.50/10 classes	N/A	4	20-30/C		✔ (+$)	Review360	Review360		Pearson/AIMSweb	http://bit.ly/1RRN75x
SSBD (2nd. Ed)	Walker, Severson, & Feil	✔	✔	✔	○	○					✔					$225	$.30/use	N/A	23	< 60/C		NR	✔			Pacific Northwest	http://bit.ly/1QGxLQU

○ Domain in Overall Score
◉ Domain Score Produced

Initial Expenses: manuals, forms, etc. /S: per student (+$) Additional Cost
Annual Subscription: web-based account /C: per class Flex-Monitoring: a flexible range of items may be selected for progress-monitoring

FLORIDA DEPARTMENT OF EDUCATION — fldoe.org

Florida Center INCLUSIVE COMMUNITIES — FCIC

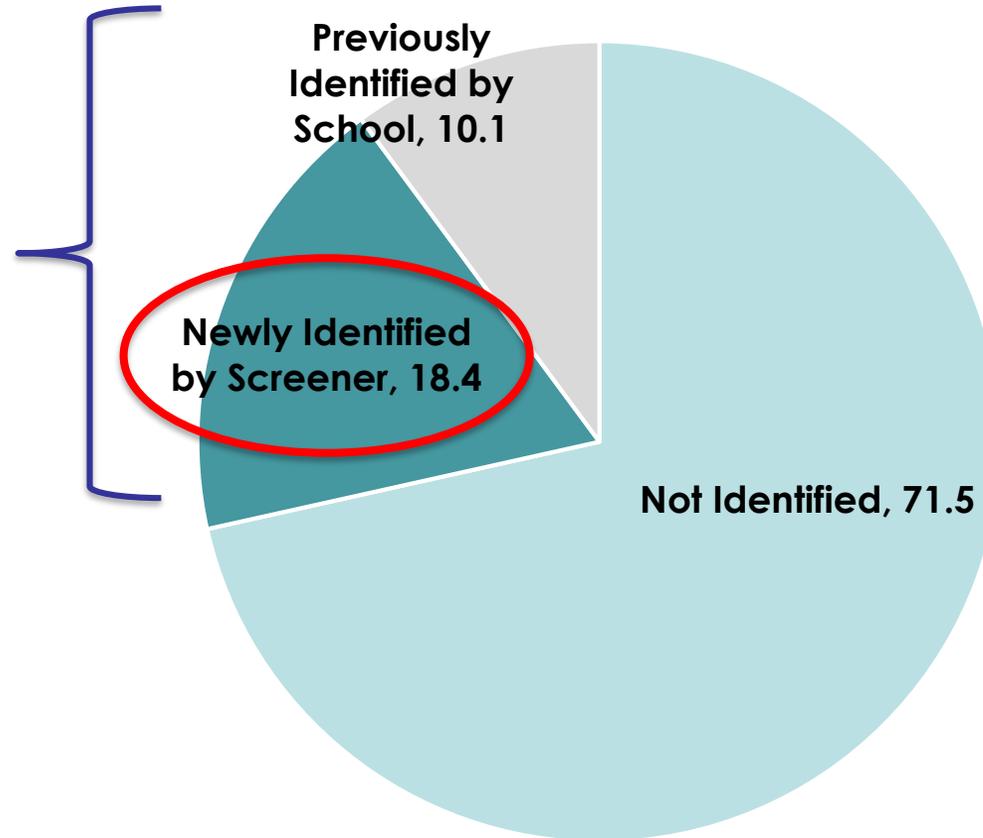USF — UNIVERSITY OF SOUTH FLORIDA — COLLEGE OF BEHAVIORAL & COMMUNITY SCIENCES

In PASS, did our data capture internalizing concerns?

- Used BASC-3 BESS Teacher with externalizing, internalizing, and adaptive skill subscales
- Compared students already receiving intervention to those **newly identified** by BASC-3 BESS Teacher

Splett et al., (2018). Comparison of Universal Mental Health Screening to students already receiving intervention in a multitiered system of support. *Behavioral Disorders, 43(3),* 344-356. https://doi.org/10.1177/0198742918761339

Splett et al. (2018)

180% increase in identified need with screener

Previously Identified by School, 10.1

Newly Identified by Screener, 18.4

Not Identified, 71.5

Splett et al., (2018). Comparison of Universal Mental Health Screening to students already receiving intervention in a multitiered system of support. *Behavioral Disorders, 43(3),* 344-356. https://doi.org/10.1177/0198742918761339
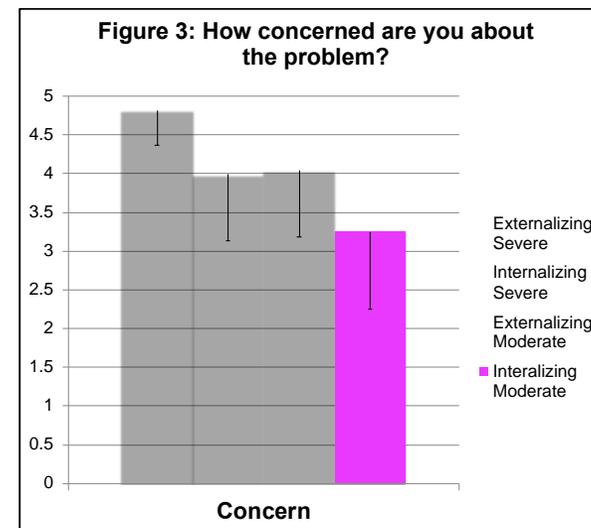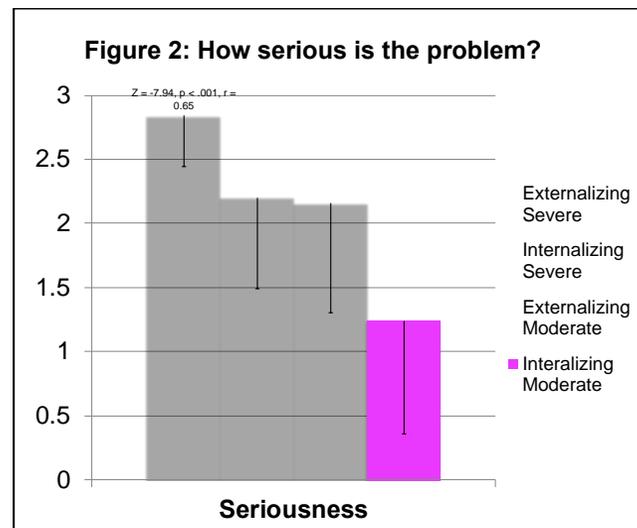
In PASS, did our data capture internalizing concerns? YES!

- **Paper in preparation**
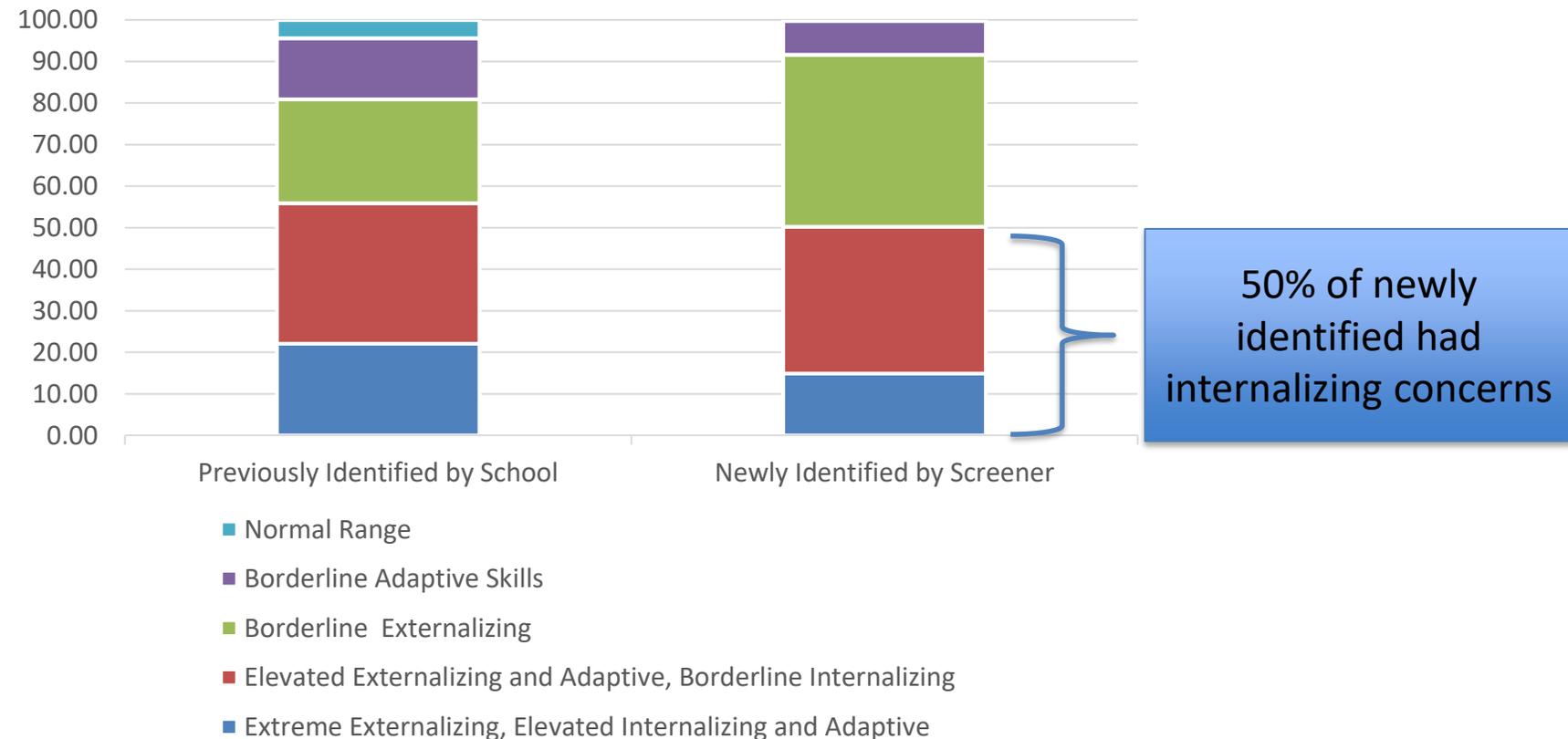
Does your team have capacity to plan/monitor interventions for internalizing concerns?

- Externalizing and internalizing concerns identified as problems at equal rates
- But externalizing rated as more severe and more concerning than internalizing

Figure 2: How serious is the problem?

$Z = -7.94, p < .001, r = 0.65$

Legend: Externalizing Severe, Internalizing Severe, Externalizing Moderate, Interalizing Moderate

Seriousness

Figure 3: How concerned are you about the problem?

Legend: Externalizing Severe, Internalizing Severe, Externalizing Moderate, Interalizing Moderate

Concern

Does your team have capacity to plan/monitor interventions for internalizing concerns?

- Teachers who are more concerned and rate problem as more serious are more likely to refer student to school and community mental health professionals

- How can we ensure teams are concerned about internalizing concerns?

Does your team have capacity to plan/monitor interventions for internalizing concerns?

1. Ensure data triangulation doesn't "wash out" internalizing concerns
   - Total Risk significantly correlated at 0.7 with Externalizing Risk but only .4 with Internalizing

2. Disaggregate screening data and intervention receipt by problem type
   - Are students with internalizing concerns receiving intervention at equal rates as those with other concerns?

TEAMING OUTCOMES

In ISF Schools…

- 3.7 times more meetings per quarter

- More Tier 1 discussion in ISF schools

- Greater attendance by principals, school counselors, school psychologists, and school mental health clinicians

- Longer meeting times (~25 minutes longer)

UNIVERSITY OF
SOUTH CAROLINA

Percentage of Students At-Risk or Presenting EB Problems Receiving Services

- Students at risk for or presenting EB problems (as rated by teachers) received more services in the ISF condition compared to the PBIS-only and PBIS+SMH conditions during the first year of intervention
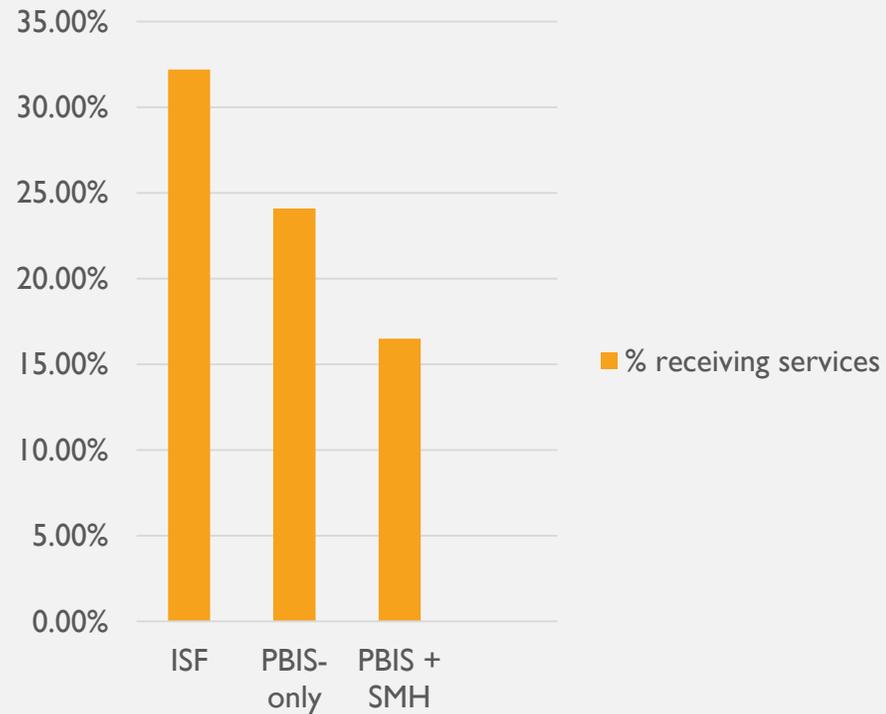
# Services in ISF Schools for Students At-Risk and at Elevated-Risk for EB

- Prior to intervention, schools supported 9.6% of students identified with elevated risk for EB problems and 19.8% of students identified with extremely elevated risk for EB problems
- After one year of ISF intervention, ISF schools were serving 20.8% of students identified as elevated and 40.7% of students identified as extremely elevated
- Essentially doubled the number of students receiving needed services
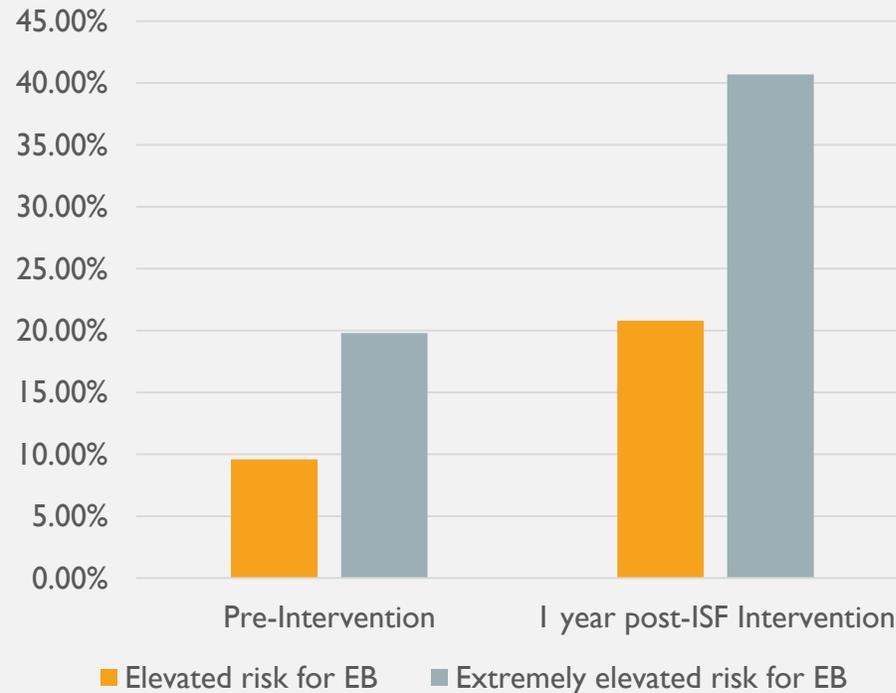
Percentage of African American Students Connected to Services Across Conditions

- A greater proportion of African American students were connected to services in the ISF condition (47.7%) compared to the other two conditions (23.1%)
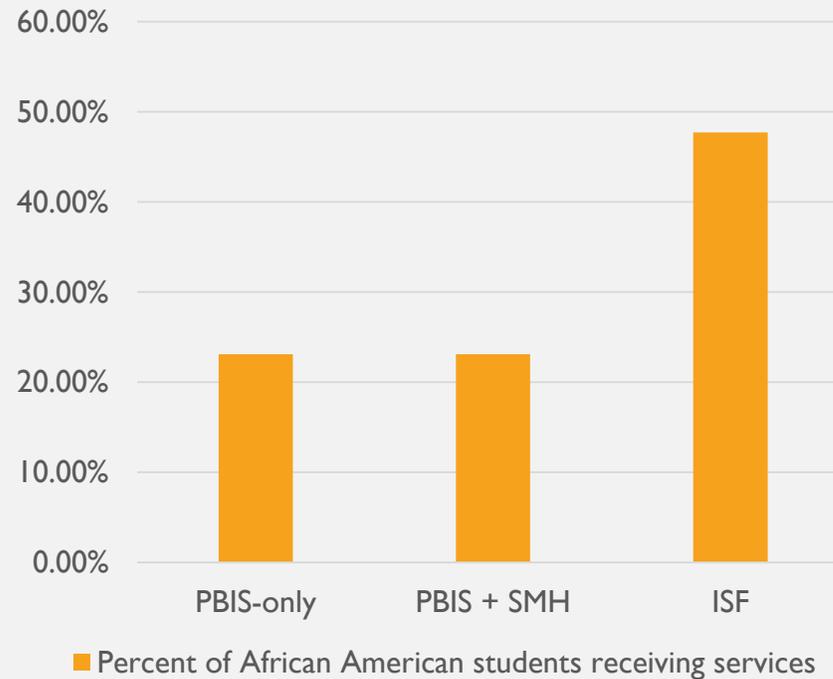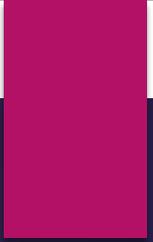
Negative Affect and Change Sensitivity

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Change Sensitivity and Edison

- Traditional test construction procedures are not aimed at finding change-sensitive measures (e.g., factor analysis)

- Need a different set of item construction procedures

  - Key idea: Select items that evidence change in the presence of an intervention but show stability in the absence of an intervention

  - Edison's problem with the light bulb: How to find a filament that emitted light but not heat

  - We've done a number of studies that demonstrate that test procedures that select change sensitive items evidence larger effect sizes than items selected through traditional measures

  - Interestingly, NA scales so created often evidence change across multiple interventions

Negative Affect (NA)

- Emotion researchers have found negative affect (NA) and positive affect (PA) to be useful descriptions of basic emotions across individuals and cultures (Barrett, 2006b; Izard, 2007).

- NA refers to emotions experienced as unpleasant or aversive (such as sadness and fear) while PA is affect experienced as pleasant states (such as happiness) (Barrett, 2006b).

- Negative affect may be the closest psychological construct to a gold standard in terms of what should be assessed to monitor and assess client progress with internalizing disorders.

NA

▶ Two NA states, depression and anxiety, have been described as "the most common reactions to stressful life events" (Carter, 2007, p. 28).

▶ Barrett (2006) suggested that affect "is a neurophysiological barometer of the individual's relation to an environment at a given point in time" (p. 48).

▶ Feelings inform individuals about their status in a perceived environment (Campbell-Sills & Barlow, 2007) and subsequently provide powerful motivation for human activity (Frijda, 1986; Izard, 2007).

NA

▶ Emotional dysregulation has become a key feature of many theoretical conceptualizations of mental health problems.

▶ In many behavioral disorders, negative affect (NA) appears to play a key role in the initiation and persistence of the problem as well as its resistance to behavioral interventions (Moses & Barlow, 2006; Persons & Fresco, 2008). Working with client affect, then, is usually an essential element for change (Mergenthaler, 1996; Moses & Barlow, 2006).

▶ A measure created specifically for assessing NA will tap into a key content domain critical for PMOA in Tier 2 and Tier 3 interventions.

Avoidance of NA

- ▶ Avoidance of the experience of NA may be a major pathway for the progression from normal NA to internalizing disorders.

- ▶ Avoidance of affect, cognitions, and behaviors may be both a cause of clinical problems as well as a major reason that clients have difficulty providing valid reports of their psychological functioning.

- ▶ And while knowledge of individuals' tendency toward avoidance may be helpful for assessing their ability to benefit from psychotherapy, many children may be unable to produce invalid data.

Progress Monitoring Outcome Assessments (PMOAs) for Feedback Enhanced Treatments (FETs)

- PMOAs are measures that reflect students' response to school based psychosocial interventions including the amount and type of intervention response students demonstrate.

- PMOA data can be employed as the feedback about student progress.

- PMOA measures can improve student outcomes by allowing service providers to identify child and adolescent students who are not responding to intervention and provide them the opportunity to alter the service provided.

Change-sensitive tests

► Construct validity of outcome assessments depends upon their sensitivity to change.

► Research suggests that items and tests vary in their ability to detect treatment effects.

► Traditional tests constructed in such a way to detect traits, not the states likely to show change from Tier 2 and Tier 3 interventions.

► We can discuss the power of tests to detect effects of interest.

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Change-sensitive tests

- Meier (2004, 2000, 1998) proposed a set of rules designed to select items and scales sensitive to change from interventions.

- The central philosophy of these rules is that **intervention-sensitive items should change in response to an intervention** and behave in a theoretically expected manner in other conditions (e.g., remain stable over time when no intervention is present).

- Research indicates that application of these rules during scale construction leads to scales with:

  - demonstrated larger treatment effect sizes,

  - adequate reliability estimates.

Available PMOA measures suitable for use in schools: Current Issues

▶ Dart et al. (2018) conducted a systematic review of the literature to find PM measures for internalizing symptoms for students.

▶ Identified 15 PM assessments for internalizing symptoms, 8 of which seen as practical for frequent use within school settings.

▶ Dart et al. focused on identifying brief internalizing measures that could be employed weekly for PM purposes.

Internalizing PM measures

▶ Few of the identified scales reported information about reliability and validity estimates.

▶ Dart et al.'s criteria specified that PM tests (a) could be completed in 5 minutes or less or (5) contained 12 or fewer items.

▶ These are debatable criteria given that (a) the optimal interval of administering PM measures is typically unknown for clinical problems and populations and (b) reliability estimates decrease with fewer items.

PM instruments

- Instruments that could be employed in clinical settings included:
- Brief Problems Checklist (Chorpita et al., 2010, and Tsai et al., 2016)
- Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS; Sukhodolsky et al., 2013)
- Positive and Negative Affect Scale (PANAS-C; Forbes et al., 2012)
- Direct Behavior Ratings (DBR; Dart et al. (2015)
- Outcome Questionnaire (OQ; Vermeersch et al, 2000).

For more information

► Dart, E. H., Arora, P. G., Collins, T. A., & Doll, B. (2018). Progress monitoring measures for internalizing symptoms: A systematic review of the peer-reviewed literature. School Mental Health. doi: 10.1007/s12310-018-9299-7

Moulton et al. (2019) PM measure

▶ Moulton et al. (2019) reported on the development of a Brief Behavior Rating Scale (BBRS) based on the 20-item Social, Academic, and Emotional Behavior Risk Screener-Student Rating Scale (SAEBRS; Kilgus & von der Embse, 2015).

▶ Moulton et al. employed an archival database of about 24,000 K-12 students (mean age = 11) who had completed the SAEBRS.

▶ SAEBRS items in the database had been completed online using a 4-point Likert response format, with items presented one at a time, during 3 administrations over the course of an academic year.

Moulton (2019) et al. continued

► Moulton et al. (2019) first evaluated the items via CFA and IRT methods, resulting in the selection of 9 items (3 per 3 scales of the SAEBRS) that included 3 items on the emotions subscale (NA).

► For the subsequent change-sensitive analyses, a subset of children (n = 774) was chosen whose risk score on the SAEBRS indicated that they "would be most likely to receive targeted (Tier II) interventions" (Moulton et al., 2019, p. 3).

Moulton et al. (2019) continued

▶ Examining change in scores across 3 administrations (at least 60 days apart), a pattern of results emerged indicating that

  ▶ (a) statistically significant differences in items scores were present across administrations,

  ▶ (b) item effect sizes for these changes were small (w^2 ranged from .01 to .04), and

  ▶ (c) change across item scores primarily occurred from Time 1 to Time 2, but not from Time 2 to Time 3.

Issues in Moulton et al.'s (2019) study

- Uncertainty about how many children in the change sensitive sample actually received an intervention.

- Use of younger children's self-report (K-12) sample.

- Sequence of analyses; the CFA and IRT analyses eliminated 11 of 20 SAEBRS items before change sensitivity analyses occurred.

- Timing of administrations (3 administrations, 60 days apart).

For more information

▶ Moulton, S., von der Embse, N., Kilgus, S., & Drymond, M. (2019). Building a better behavior progress monitoring tool using maximally efficient items. *School Psychology*. doi: 10.1037/spq00003344

In summary…

- We have made progress in creating progress monitoring and outcome assessment measurements for NA constructs

- We still have many basic questions to be addressed

  - Cross validation of change sensitive items

  - Demographic influences on change sensitive items

  - Source differences with change sensitive items (teachers: Elem vs second)

- Much of the development of these measures is by private companies

- Why so little grant funding?