

THE SQUEAKY WHEEL DILEMMA: EXAMINING THE DISPROPORTIONATE FOCUS ON EXTERNALIZING PROBLEMS IN CHILDREN'S MENTAL HEALTH

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Therapy
targets for
youth with
comorbid
internalizing
and
externalizing
diagnoses



AGENDA

- **Background/Study Aims**
- **Method**
- **Results**
- **Discussion**
 - **Practical Implications and Potential Solutions**

BACKGROUND

- **Internalizing/Externalizing Problems in Children**
 - **Internalizing: Anxiety/Depression/Somatization**
 - **Externalizing: Disruptive Behavior Disorders/Hyperactivity**
 - **Differentials in factor loadings, treatment response, and intervention strategies**

BASC-2

- Administered to students referred for behavioral health concerns
- Serves as assessment and progress monitoring tool
 - *“60% of a sample of students receiving SBBH services will show improvement in functioning on the Teacher Rating Scale of the BASC-2”*
- Examined rates of change and number of clinically at-risk students by internalizing/externalizing distinction

Number of students with elevations on teacher BASC2 scales:

Far more elevations of externalizing

| | N Above At-Risk |
|--------------------------------|------------------------|
| TRS C Scale | |
| Developmental/Social | 1721 |
| Anger Control | 1709 |
| Attention Problems | 1648 |
| Behavior Symptom Index | 1595 |
| School Problems | 1509 |
| Negative Emotionality | 1465 |
| Emotional Self Control | 1441 |
| Withdrawal | 1432 |
| Executive Functioning | 1391 |
| Learning Problems | 1315 |
| Hyperactivity | 1307 |
| Atypicality | 1296 |
| Bullying | 1288 |
| Externalizing Composite | 1238 |
| Aggression | 1186 |
| Depression | 1153 |
| Conduct Problems | 981 |
| Internalizing Composite | 953 |
| Anxiety | 639 |
| Somatization | 586 |

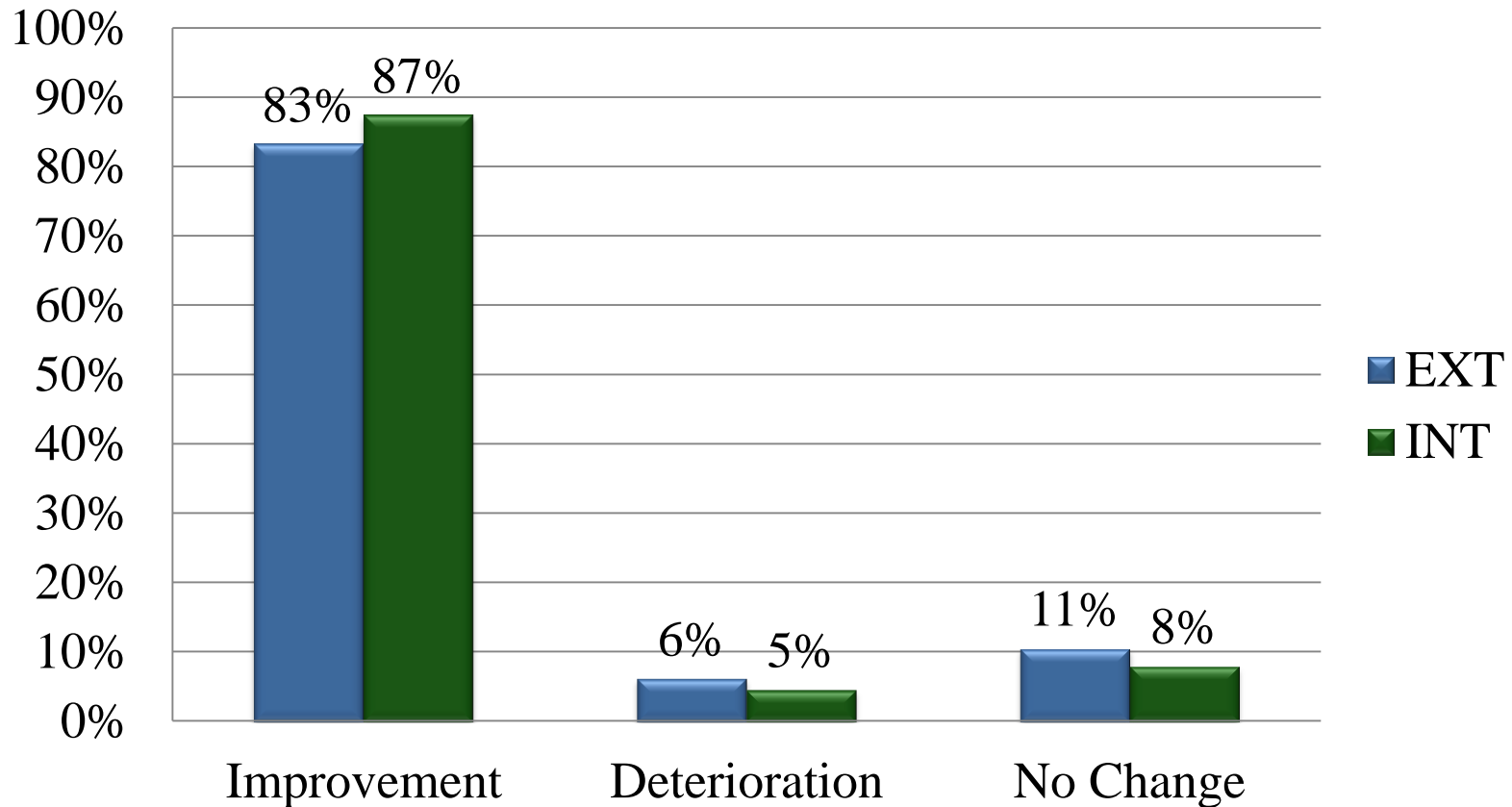
Number of students with elevations on parent BASC2 scales:

Far more elevations of externalizing

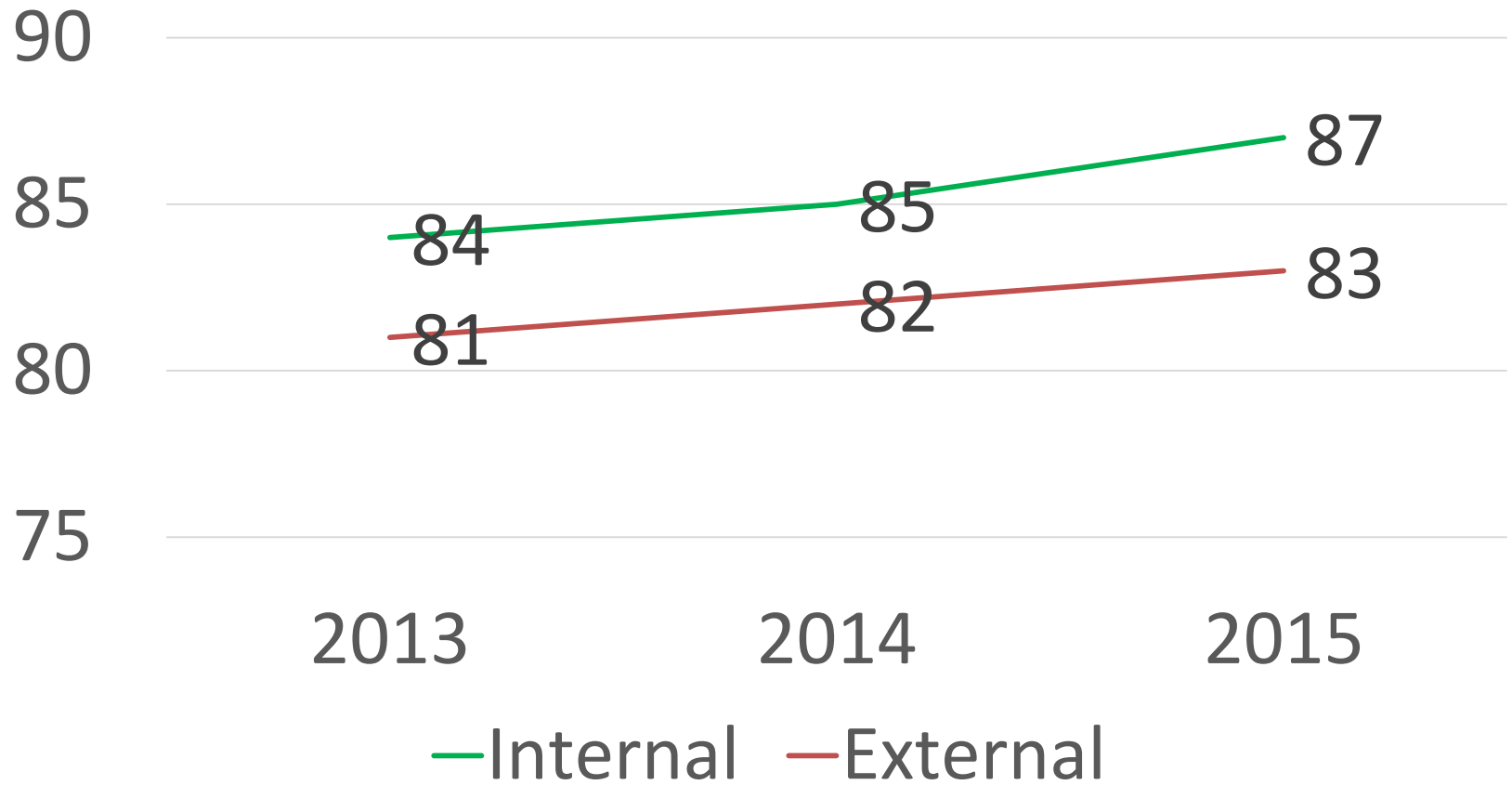
| PRS-C Scale | N Above At-Risk |
|--------------------------------|------------------------|
| Attention Problems | 726 |
| Behavior Symptom Index | 567 |
| Developmental/Social | 562 |
| Executive Functioning | 558 |
| Anger Control | 537 |
| Atypicality | 535 |
| Hyperactivity | 525 |
| Externalizing Composite | 472 |
| Negative Emotionality | 454 |
| Emotional Self Control | 442 |
| Bullying | 428 |
| Withdrawal | 404 |
| Conduct Problems | 386 |
| Aggression | 383 |
| Depression | 366 |
| Internalizing Composite | 323 |
| Anxiety | 273 |
| Somatization | 214 |

Teacher Report RCI: 2015

Reliable Change Index: TRS Child and Adolescent



RCI: Percent Improving by Disorder Type



COMORBIDITY OF INTERNALIZING/ EXTERNALIZING PROBLEMS

- Comorbidity is common
 - 20-50% of anxious/depressed youth also meet criteria for DBD diagnosis
- Comorbidity is often an indicator of more severe pathology
 - More severe symptoms
 - Attenuated medication response
 - Mixed evidence of worse outcomes

(Rohde, Clarke, Lewinsohn, Seeley, & Kaufman, 2001; Cunningham and Ollendick, 2010; Lewinsohn, Rohde, & Seeley, 1995; Ingoldsby, Kohl, McMahon, & Lengua, 2006; Ezpeleta, Dome`nech, and Angold, 2006; Ginsburg, Kingery, Drake, & Grados, 2008)

COMMUNITY TREATMENT

- **Intensive in-home therapy:**
 - Commonly referred by schools
 - Qualification requires significant impairment
 - Multiple hours of service per week
 - Provided by multiple agencies
 - Services are widely variable

REFERRAL BIAS TOWARD EXTERNALIZING PROBLEMS

Evidence points to a referral bias toward externalizing cases:
Prevalence of DSM Disorders

Community Samples w/Severe Impairment (2010)

DBD: 8.7% (SE=.8)

Anxiety disorders: 8.3% (SE=.4)

Mood Disorders: 11.2% (SE=1.0)

Hawaii DOH-Referred Sample (2009)

Total N=1708

DBD: 1176 (69% of sample)

Anxiety Disorders: 485 (28% of sample)

Mood Disorders: 729 (43% of sample)

Assuming community prevalence rates, a child in the DOH system is 2.35 times more likely to get treated for a DBD diagnosis than for an anxiety diagnosis, and 2.06 times more likely to get treated for a DBD diagnosis than for a mood diagnosis.

STUDY AIMS

- 1.** To assess whether psychological treatment for youth with comorbid externalizing and internalizing disorders might be more focused on addressing externalizing rather than internalizing pathology.
- 2.** To evaluate whether such a trend persists after accounting for other treatment and client characteristics.

METHOD

Sample

The MTPS

Analysis

SAMPLE

Youth receiving a 90 to 1611 day-episode of “Intensive In-Home” Services (N=679) in the following diagnostic groups:

- **Group I_o (Internalizing Only) n=195**
Depressed/Anxious only
- **Group I_p (Internalizing Primary) n=75**
Primary Depressed/Anxious + DBD or ADHD-C/PH
- **Group E_o (Externalizing Only) n=95**
DBD or ADHD-C/PH only
- **Group E_p (Externalizing Primary) n=314**
Primary DBD or ADHD-C/PH + Depressed/Anxious

SAMPLE

Youth receiving a 90 to 1611 day-episode of “Intensive In-Home” Services (N=679) in the following diagnostic groups:

| Youth Characteristic | Diagnostic Group | | | | Total (N=679) |
|--|------------------------|-------------------------|--------------------------|------------------------|---------------|
| | I-only (n=195) | I-primary (n=75) | E-primary (n=95) | E-only (n=314) | |
| Percentage Male ¹ | 47% _a | 53% _a | 66% _b | 77% _b | 64% |
| Percentage Asian/Pacific Islander ¹ | 17% _a | 19% _a | 10% _{ab} | 8% _b | 12% |
| Mean Age at Episode Start (SD) ¹ | 13.9(3.1) _a | 13.1(3.2) _{ac} | 12.7(3.4) _{abc} | 11.8(4.0) _b | 12.7(3.7) |
| Mean CAFAS Score at Episode Start (SD)* | 89(32) | 95(26) | 92(29) | 88(28) | 90 (29) |
| Mean Treatment Episode Length in Days (SD) | 267(220) | 250(151) | 248(203) | 237(176) | 249(191) |

THE MONTHLY TREATMENT PROGRESS SUMMARY (MTPS) (CAMHD, 2008)

Targets Addressed This Month (*number up to 10*):

| | | | | |
|------------------------------------|-----------------------------------|-------------------------------------|--------------------------------|---------------------------------|
| Activity Involvement | Community Involvement | Hyperactivity | Positive Peer Interaction | Shyness |
| Academic Achievement | Contentment, Enjoyment, Happiness | Learning Disorder, Underachievement | Phobia/Fears | Sleep Disturbance |
| Adaptive Behavior/Living Skills | Depressed Mood | Low Self-Esteem | Positive Thinking/Attitude | Social Skills |
| Adjustment to Change | Eating, Feeding Problems | Mania | Pregnancy Education/Adjustment | Speech and Language Problems |
| Aggression | Empathy | Medical Regimen Adherence | Psychosis | Substance Use |
| Anger | Enuresis, Encopresis | Occupational Functioning/Stress | Runaway | Suicidality |
| Anxiety | Fire Setting | Oppositional/Non-Compliant Behavior | School Involvement | Traumatic Stress |
| Assertiveness | Gender Identity Problems | Peer Involvement | School Refusal/Truancy | Treatment Engagement |
| Attention Problems | Grief | Peer/Sibling Conflict | Self-Control | Willful Misconduct, Delinquency |
| Avoidance | Health Management | Personal Hygiene | Self-Injurious Behavior | Other: |
| Cognitive-Intellectual Functioning | Housing/Living Situation | Positive Family Functioning | Sexual Misconduct | Other: |

ANALYSIS

- **Defining the criterion variable**
 - **Determined Internalizing (I) and Externalizing (E) targets**
 - **Determined proportion score for each target**
 - **Conducted Mann-Whitney U tests on all target proportion scores**

ANALYSIS

Externalizing Targets

Willful Misconduct or
Delinquency

Oppositional or Non-Compliant
Behavior

Hyperactivity

Attention Problems

Aggression

Self-Injurious Behavior

Anger

Empathy

Peer or Sibling Conflict

Range of Mann-Whitney $U = 15570-29925$; $n_1=195$,
 $n_2=314$; $p < .05$

Internalizing Targets

Traumatic Stress

Suicidality

Self-Management or Self-Control

Personal Hygiene

Grief

Depressed Mood

Anxiety

Self-Esteem

Sleep Disturbance or Sleep Hygiene

School Refusal or Truancy

Shyness

Contentment or Enjoyment or
Happiness

Psychosis

ANALYSIS

- Defining the criterion variable:

\sum MTPSs with only E targets - \sum MTPSs with only 'I' targets

Total Number of MTPSs

Resulting in a rational score between -1 and 1

ANALYSIS

■ Defining the dependent variable:

| Month | 1 | 2 | 3 | 4 | 5 | 6 |
|-----------------------|---|----|---|---|---|---|
| Internalizing Targets | 4 | 2 | 1 | 0 | 0 | 0 |
| Externalizing Targets | 1 | 0 | 2 | 0 | 1 | 2 |
| Monthly Score | 0 | -1 | 0 | 0 | 1 | 1 |

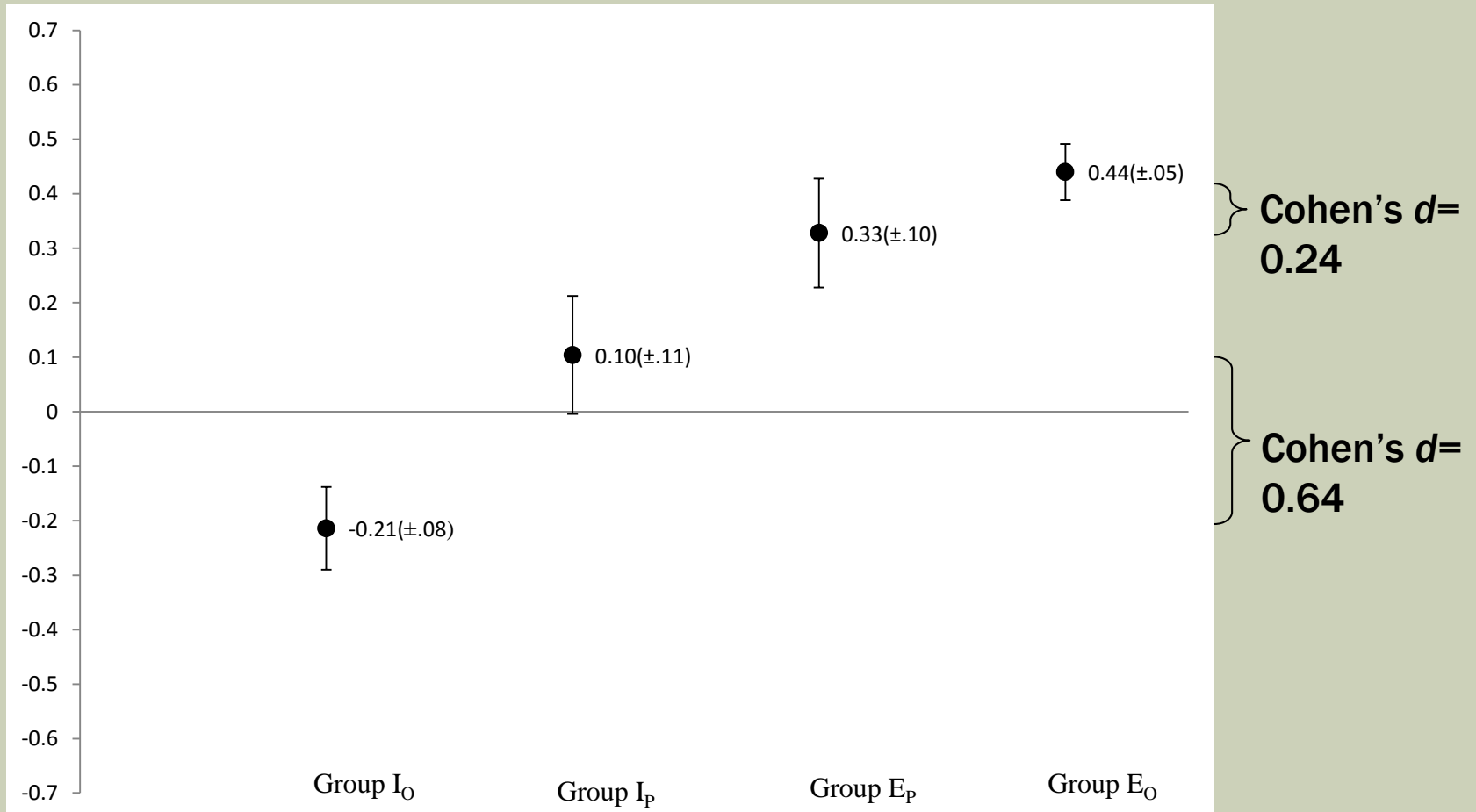
$$\text{I/E Score} = 1/6 \text{ or } .1667$$

ANALYSIS

- **ANOVA/ANCOVA Analyses**
 - Contrast-coded
 - Examined between-group differences
 - Controlled for age, gender, Asian/Pacific Islander ethnicity, length of treatment episode, & functional impairment

RESULTS

I/E Score distribution by diagnostic group (± 2 SEs)



DISCUSSION

- Therapists' disproportionate selection of externalizing treatment targets persists despite significant covariates
- Possible reasons?

DISCUSSION

- Therapists' disproportionate selection of externalizing treatment targets persists despite significant covariates
- Possible reasons:
 - Salience of externalizing problems
 - Referral bias
 - Difficulty of treating internalizing problems
 - Therapists know best
 - Expectation biases

PRACTICAL IMPLICATIONS

- In the Hawaii system of care, externalizing problems are referred and treated to a greater extent than internalizing problems
 - Is this true in your school system?
 - What have you done, or what ideas do you have, to address this problem?

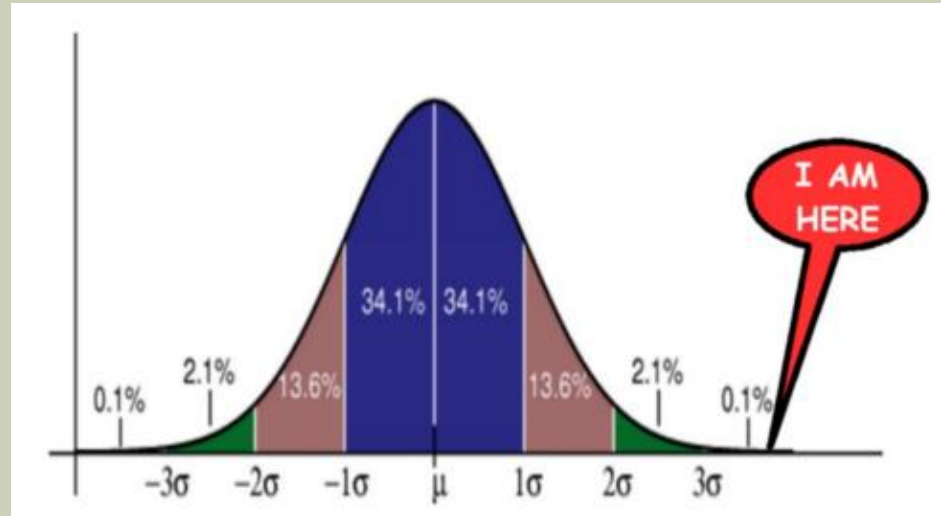
POSSIBLE SOLUTIONS

- **Universal Screeners**
- **Seeking referrals from alternative sources**

UNIVERSAL SCREENERS

■ Purpose

- Identify at-risk youth



■ Various types

- Parent screeners
- Teacher screeners
- Youth self reports

UNIVERSAL SCREENERS

- **Various types**
 - **Parent screeners**
 - **Allow for early intervention**
 - **Can assess potential risk factors**
 - **Child temperamental inhibition**
 - **Low SES, Parental stress, Family history of psychopathology**

UNIVERSAL SCREENERS

■ Various types

■ Teacher screeners

- Ranking at-risk students + observations
 - SSBD
- Long form
 - BASC, BIMAS
- Short form
 - BESS, SRSS-15 (5 items!)
- Allows for maximum response rates

UNIVERSAL SCREENERS

- **Various types**
 - **Student screeners**
 - **Less resource-intensive for parents/teachers**
 - **Avoids rater bias**
 - **Can be administered by computer**

UNIVERSAL SCREENERS

■ Considerations

- Buy-in is essential
- Incentives might help
- Maximize utility while minimizing demand
- Active/passive consents?
- Repercussions?

ALTERNATIVE REFERRAL SOURCES

Consider CASSP Principles: *Community Based, Multi-System* solutions

- Domestic violence programs
- Child Welfare Services
- Pediatricians
- Homeless shelters
- Educational support staff (EAs, paraprofessionals, etc.)

MAHALO!

[HTTP://HELPYOURKEIKI.COM](http://helpyourkeiki.com)

HOME ABOUT US MORE RESOURCES

brought to you by
EBS Hawaii
Evidence-Based Services Committee of Hawaii

Help Your Keiki






COMMON PROBLEMS


WHAT WORKS


FIND HELP

ADDRESSING Mental Health CONCERNS IN PRIMARY CARE A CLINICIAN'S TOOLKIT

EVIDENCE-BASED CHILD AND ADOLESCENT BEHAVIORAL DISORDERS (PWEBS) Database, available at www.practicewise.com. If this is not the most current version, please check the database.

| Problem Area | Level 1- BEST SUPPORT | Level 2- Good Support |
|---------------------------------------|---|---|
| Anxious or Avoidant Behaviors | Cognitive Behavior Therapy (CBT), CBT and Medication, CBT with Parents, Education, Exposure, Modeling | Absenteeism Training, CBT for Child and Family Psychoeducation, Medication, Relaxation |
| Attention and Hyperactivity Behaviors | Behavior Therapy and Medication, Self-Verbalization | Biofeedback, Contingency Management, Parent Management Training, Problem Solving, or with Teacher Psychoeducation, Exercise (with or without Relaxation), Mindfulness, Working Memory |

02:35 HD :: vimeo

References available by request; please email mwinfree@hawaii.edu