

Early Findings: A Systematic School Mental Health Screening Process

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Overview

- This presentation will discuss the early results of a project which evaluated an innovative system of empirically-based screening for mental health problems
- Used with students in grades 3 through 12 in Nassau County, Florida
- Students completed brief, computerized screener regarding their mental health risks and the need for follow-up with a mental health professional
- Students and their parents provided with recommendations regarding ways to improve their mental health
- Linked to local providers



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Objective 1:
Importance of Mental
Health Screening in
Schools



Students Need Better Access to Help

“Half of all lifetime cases of mental illness begin by age 14, and that despite effective treatments, there are long delays — sometimes decades — between first onset of symptoms and when people seek and receive treatment.”



Students Need Better Access to Help

The best time to intervene and treat is between 2 and 4 years between the presentation of the first symptoms and the onset of the full-blown disorder—Yet the average diagnosis of mental health disorder usually occurs 10 years or more after the onset of first symptoms (Wang, Berglund, Olfson, & Kessler, 2004)

A blurred background image of a classroom. The room is filled with rows of white desks and black chairs, arranged in a typical classroom layout. The lighting is soft and even, and the overall image has a slight haze or blur effect.

Universal screenings can allow individuals to become more aware of their needs early and provide a system through which they can be linked to treatment services



Children's Needs Go Unmet

1 in 10 adolescents experience mental health problems that impair their functioning in school, at home, or with peers (Lawrence, Gootman & Sims, 2009)



Children's Needs Go Unmet

Of the 20% of children with identified mental health treatment needs, it is estimated that 80% of those children fail to receive services (Katoaka, Shang, & Wells, 2002)



It's Up To Us

Many times, despite best intentions, schools are the de facto mental health treatment providers (Burns et al. 1995)



Discussion Question

How does your school identify mental health treatment needs?

In Nassau County

All school principals for grades 3-12 (N = 12) completed pre-surveys prior to implementation of screening system in Nassau County

- **50% stated no screening process currently in place**
- **Of the 6 that stated there was a process, 2 failed to report on the type of system that was in place**
 - **“Speak with counselor”**
 - **“through guidance”**
 - **Through a system of care online referral process that has been in place in Nassau county schools since 2015**

We Are Not Alone

Evidence-based, systematic risk assessments are rare in school

An estimated 2% of schools carry out regular universal mental health screening (Romer & McIntosh, 2005)

What Schools Do

- **Schools often rely on discipline referrals or teacher judgement to determine mental health risks (Kalberg, 2010)**
- **Schools may be waiting too long to refer to treatment**
 - **After EBD signs, behavioral difficulties, and consequences of misbehavior**
 - **After development of more severe symptoms or psychological disorder (Flett & Hewitt, 2013)**
 - **After impacts peer relationships, school performance, adaptive skill development**
- **Schools may fail to identify children with of internalizing disorders (i.e. depression, anxiety, or suicidal ideation) (Kim, 2014)**



Missed Opportunities

By waiting for EBD distinction, opportunities for prevention and early intervention are missed (Kim, 2014)



Devastating Consequences

Suicide is the second
leading cause of death for
Florida children ages 10-18



Devastating Consequences

Nassau County has a higher rate of suicide than the national average, with Nassau county having an estimated 15.7 deaths per 100,000 population in 2015, higher than the 13.3 deaths per 100,000 nationally

(<http://www.nefloridacounts.org/>)

It's Up To Us

- **Universal screening in schools**
- **Systems linking children to providers in the community**
- **Communicating quickly and effectively with parents, school personnel, community providers**

Few Other Screening Measures Available

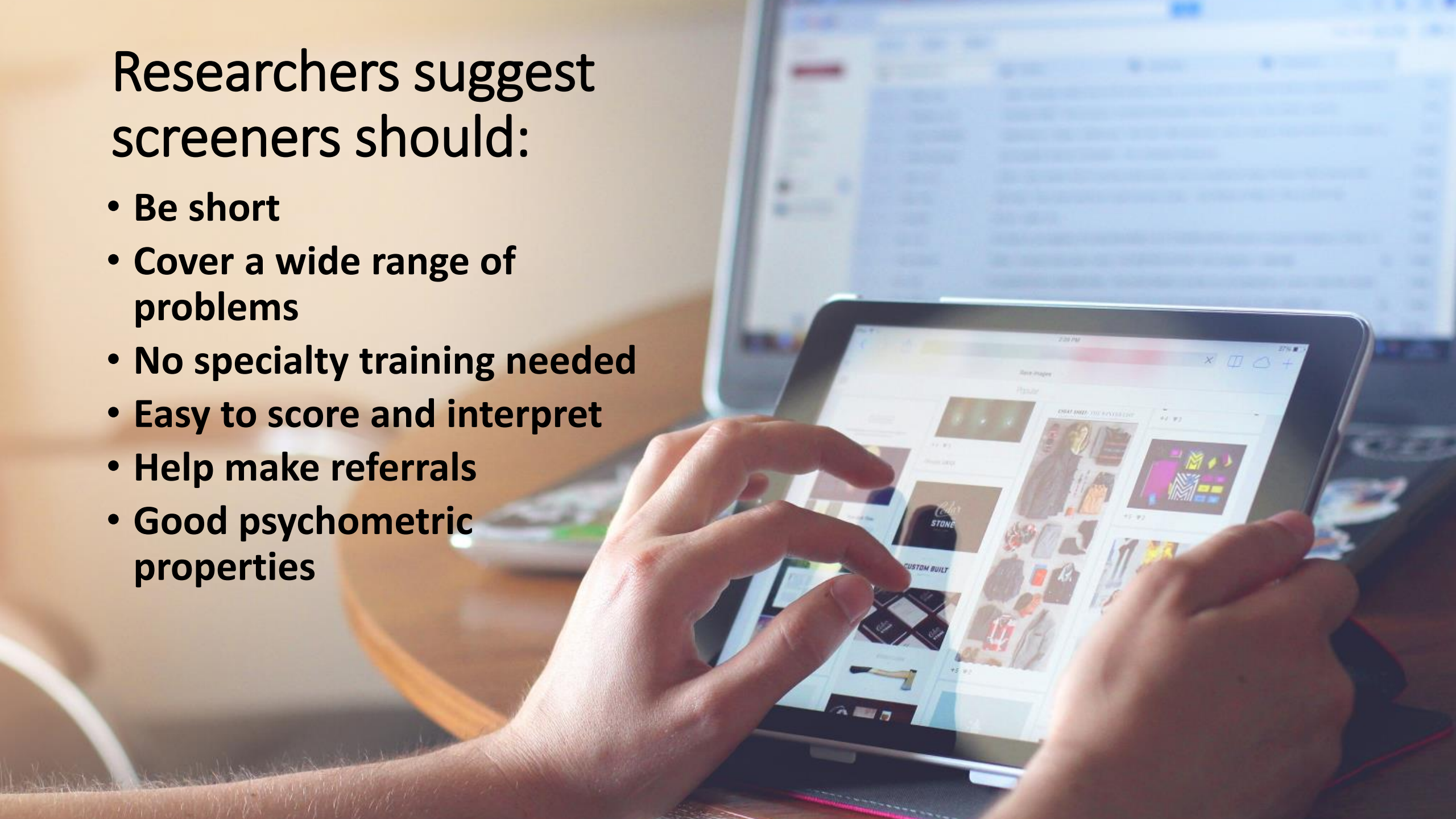
- **Broad parent or teacher report measures**
Achenbach, Conner's, BASC
- **Some self-report measures that focus on symptom reporting related to specific disorders or groups of disorders**
Children's Depression Inventory, Beck Youth Inventories, Anxiety scales
- **Few include clear indicators of severe difficulties**
- **Longer symptom measures for diagnoses**
MMPI-A, DISC

Few Other Screening Measures Available

- **Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997)**
 - Under identified some disorders (Goodman et al 2000)
- **Pediatric Symptom Checklist (PSC; Jellinek et al 1999)**
- **Do not assess for some important indicators of treatment needs**
 - Psychosis
 - Eating problems
 - Self-harm
 - Suicidality
- **Important to consider impact on daily functioning**

Researchers suggest screeners should:

- **Be short**
- **Cover a wide range of problems**
- **No specialty training needed**
- **Easy to score and interpret**
- **Help make referrals**
- **Good psychometric properties**



Advantages of Technology

- Immediate results
- Reduced scoring time
- Reduced burden on system
- Increased standardization of implementation
- Seamless integration



Adolescents More Comfortable with Computer Measures

When a computerized screening measure was used in pediatric setting more adolescents:

- **thought their visits were confidential**
- **felt they were listened to carefully**
- **more satisfied (Gadomski et al 2015)**

Systematic Screening and Referral

Programs like this can help prevent children from experiencing devastating, long-term consequences that develop from having untreated mental health disorders.

Objective 2:
Description of a newly developed
screening system that identifies
mental health needs and links
individuals to community mental
health providers

Procedures

- FSU IRB & School Board Approval
- Pre-survey to principals and mental health treatment providers
- Consent
- Assent
- Complete Screening Measures
 - CELPHIE
 - Strengths and Difficulties Questionnaire



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Immediate Feedback



Mental Wellness Basics

NUTRITION - Eat balanced meals regularly.

SLEEP - Wake up at the same time every day and get around 8 hours of sleep a night.

SOCIAL - Spend time with others. Get support from friends and family.

EXERCISE - Get your heart pumping for at least 30 minutes everyday.

SELF-CONNECTION - Spend time journaling, in art, or listening to music to relax daily.

MEDICINE - Meet with a doctor regularly and take all medications as prescribed.

COUNSELING - Find a counselor using our referral guide.

CELPHE.ORG

Procedures

- Parent Feedback via phone
 - Given list of local treatment providers
- Post survey to principals and treatment providers



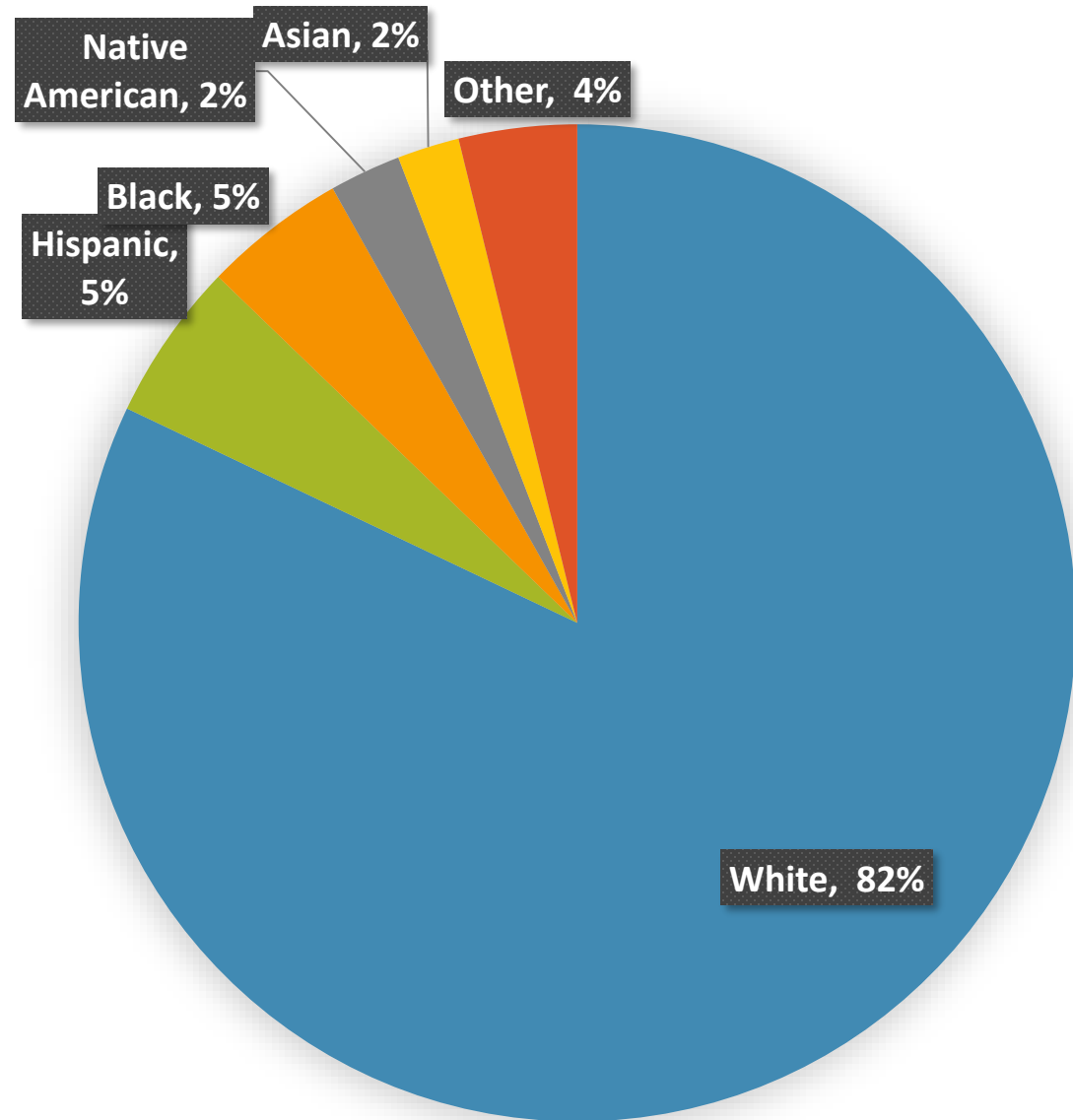
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Participants

- 394 participating students in grades 3 through 12.
- 41% Male; 59% Female
- Sought out participation of all children in these grades in Nassau County Florida
 - Of the 9,387 reported students in these grades, 394 participated (4%)



Screening Measure

- The CELPHIE is a novel, computerized measure designed to screen children (ages 8-18) that are in need of mental health services
- This measure takes approximately 5-10 minutes to complete



celphie
GET A SNAPSHOT OF YOUR MENTAL STATE



Screening Measure

- Includes 26 questions, primarily in yes/no format, in which children indicate if they have experienced any symptoms related to a variety of mental health disorders
- It also includes four questions related to the impact of these symptoms on their daily functioning
- The CELPHIE is immediately scored after completion and determines if a child has Low, Moderate, or High mental health needs

CELPHE Demo

Objective 3:
Presentation of results of
research on this newly
developed system

CELPHIE Psychometric Properties

Descriptive Statistics

	Observed Minimum	Observed Maximum	Total Possible	Mean	Standard Deviation	Cronbach's Alpha
SDQ Difficulty	0	29	40	12.48	6.16	0.80
SDQ Impairment	0	10	10	1.30	2.02	0.67
CELPHIE Symptoms	0	28	33	9.49	6.40	0.89
CELPHIE Impairment	0	4	4	1.04	1.14	0.55

Relation to SDQ

Correlations between screening measures

Measures	CELPHE Subscales		SDQ Subscales	
	Symptoms	Impairment	Difficulties	Impairment
<i>CELPHE Subscales</i>				
Symptoms	-			
Impairment	.68**	-		
<i>SDQ Subscales</i>				
Difficulties	.80**	.58**	-	
Impairment	.60**	.45**	.51**	-

** $p < .001$.

CELPHE Symptoms and SDQ Difficulties Risk Ratings

Crosstabulation Table

	SDQ risk level			Total
	Normal	Borderline	Abnormal	
<i>CELPHE risk level</i>				
Low	158	15	4	177
Moderate	11	0	0	11
High	106	56	44	206
Total	275	71	48	394

There is a significant relationship between individuals' scores on the SDQ and the CELPHE.

Cramer's $V = .30$,
 $p < .001$

CELPHE and SDQ Risk Ratings

Crosstabulation Table

	SDQ risk level		Total
	Normal	Abnormal	
<i>CELPHE risk level</i>			
Low	158	4	162
High	106	44	150
Total	264	48	312

True Positive Rate

Sensitivity = 91%

False Omission Rate

Negative Predictive Value = 97%

Likelihood ratio+ = 2.28

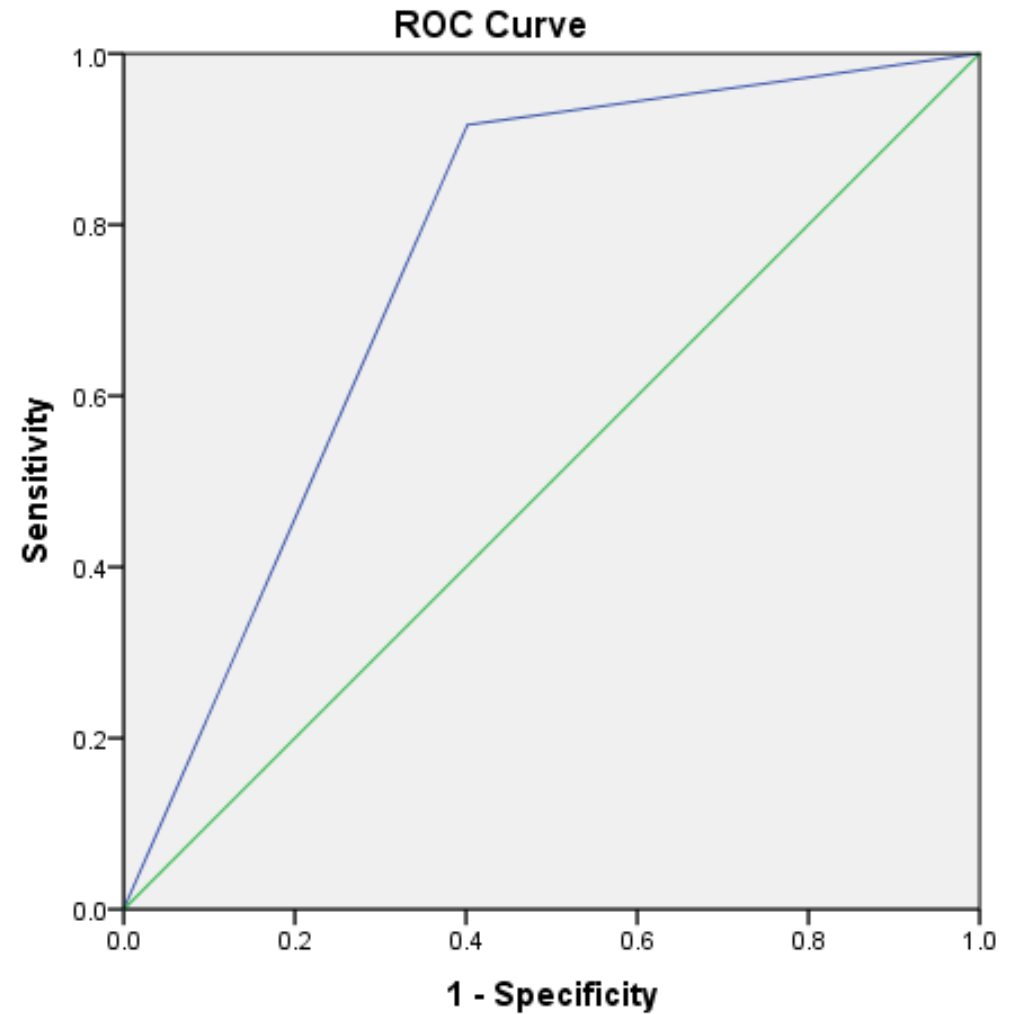
High number of false positives

CELPHE and SDQ

Receiver Operating Characteristics

Plotting true positives by false positives

Area Under the Curve = .76

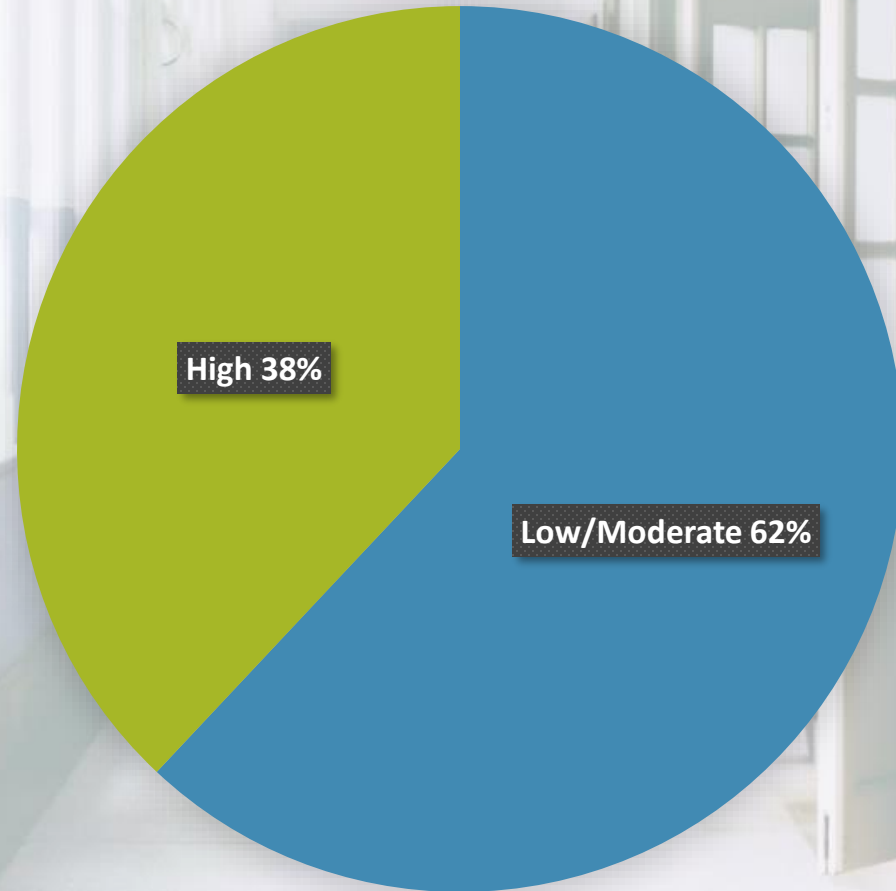


Diagonal segments are produced by ties.

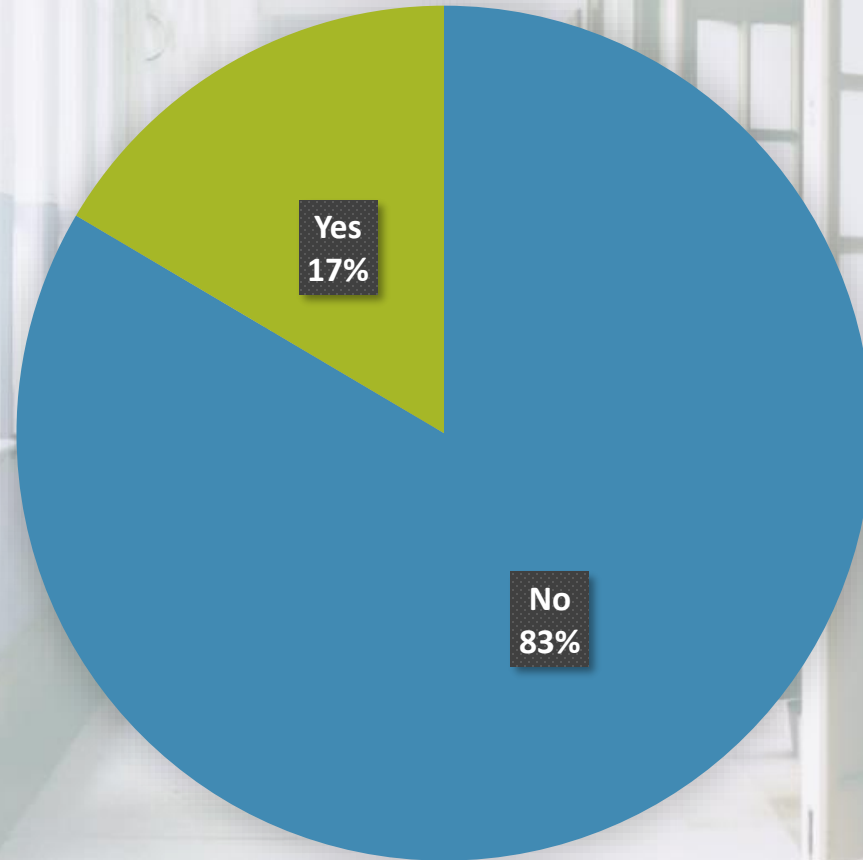
Most endorsed items



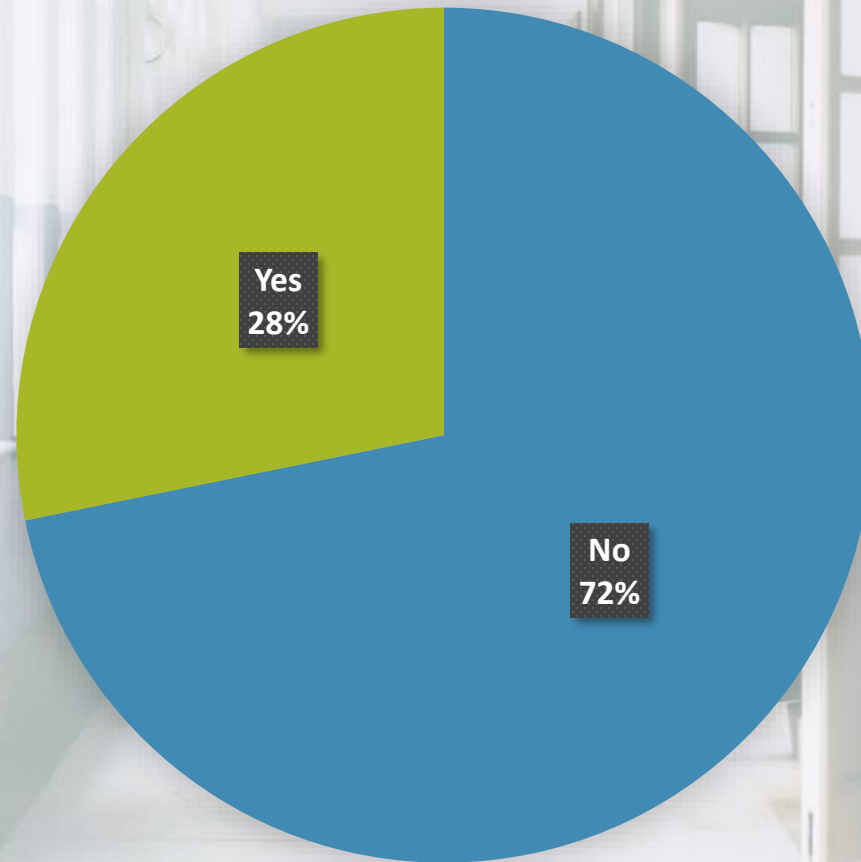
High or Abnormal Risk



Suicidal Ideation



School Problems



Principal Feedback

- **Overall Principals reported more satisfaction with this method of identification and referral to outside providers than previous methods in place**
- **Reported on average 4 (scale of 1-6) with level of satisfaction with**
 - **Methods of identifying mental health needs**
 - **Ability to detect needs in all students**
 - **Ability to refer students in need**
 - **Efficiency in detecting mental health needs**

Mental Health Treatment Providers

Community Partners

- **Reported increase in number of referrals from school system on average**
- **Supportive and enthusiastic about reaching needs**
- **Feel screening method provides useful information**

Used in our practice

- **Feedback from social workers, therapists, psychologists, psychiatrists**

Cases

Multiple unidentified children found

- **Good student, athlete, high risk, high suicide risk**
- **Isolated, bullied children**
- **Anxiety and Depression**



Problems in Universal Screening for Mental Health Needs

Summarized in Dowdy, Ritchey, & Kamphaus, 2010

- the lack of technically adequate and practical screening measures
- high financial and personnel costs
- unrecognized social significance and importance of the screening by the school personnel
- societal stigma for screening of mental health problems and the schools role in addressing these mental health needs

Our Story

- **Negative press related to political issues regarding funding source**
- **Hacking**
- **Rebuilding**





Community Feedback

- **Students**
 - help themselves or help peers to get help
- **Teachers**
 - mental health needs can be addressed
- **Principals, Counselors, Social Workers**
 - safety net for those in their school
- **Parents, grandparents, other family**
 - psychology educational opportunity
- **Mental Health Providers**
 - professional development opportunities



Community Feedback

- **Support of school board**
- **Project in the local courts system with adults**
- **Plans to expand into physicians offices, emergency room**

Discussion

Working towards universal screening

- **Limited number of participants**
- **Smoothly working in the schools**
- **Consent processes**
- **Fighting against the stigma**

I Agree



Future Goals

- **More direct communication with the schools regarding results**
- **Collaboration and gathering more information from community partners (i.e. school grades, attendance, health information, etc.)**
 - **Build even greater evidence to support the CELPHIE**
 - **Longitudinal, relation to specific diagnoses, utility in clinic**
 - **More formal feedback from community partners**