Boone County Schools Mental Health Coalition

Summary of Accomplishments
January 2018 – December 2018

The Boone County Schools Mental Health Coalition (BCSMHC) is a multidisciplinary collaborative among Boone County's six independent school districts, the University of Missouri, College of Education (COE), Department of Educational School and Counseling Psychology (ESCP), the Missouri Prevention Center (MPC), and the School of Social Work (SSW).

Mission Statement: To promote a coordinated, multidisciplinary, collaborative initiative through: (a) implementation of a scientifically-based model of prevention and intervention, (b) reduce contextual risk factors and promote existing protective factors, and (b) provide access for in-risk youth and their families to comprehensive mental health assessment and case management services.

The project initiatives include the following:

- Develop and implement a county-wide ecological assessment system to gather data on risk and protective factors that are predictive of poor school, mental, and life course outcomes;
- Provide professional development to school personnel in Boone County in evidence-based practices shown to improve school climate and individual student and family functioning.
- Support school-based teams to implement evidence-based programs with at-risk and in-risk youth, and use data to monitor progress of student outcomes;
- Improve the coordination of information and services for at-risk youth and their families

Basic Coalition Overview

Since the Coalition was funded in January of 2015, this partnership between County schools and the University of Missouri has resulted in a fully enacted coordinated system of prevention and intervention. Each year, schools in Boone County and conduct universal screening using both teacher (K-12) and student report (3-12), occurring three times per year. These data are disseminated to schools through a fully functional web-based clinical dashboard system, which provides schools reports showing the number of students reported to have each risk indicator.

Using a public health model of risk to provide schools feedback on areas of need for universal prevention efforts, school reports indicating areas of high risk (i.e., 20% or more of students were reported to have this risk indicator) are represented in red, areas with some risk (15-19% of students are reported to have the risk indicator) are represented in yellow, and areas with

low risk (less than 15% of students are reported to have the risk indicator) are represented in green. These data can then be used by school level problem solving teams to assess areas of concern at the school and grade levels and determine if and what universal prevention efforts can be put into place. In addition, individual student reports are generated using a similar red, yellow, and green system to indicate students who in comparison to their peers are at risk across the various risk constructs. These reports can be used to determine the appropriate next steps toward supporting those students at greatest risk (e.g., develop individualized behavior support plan, small group counseling, etc.). Each school administrator and their problem-solving teams have access to this dashboard through a secure server. In addition, all district administrators have their own unique account to view all building's data through a secure server. This provides district administration with a comprehensive account of risk in their district and across levels.

Services are provided across 8 areas across school buildings, including 1) teacher checklist administration, 2) student checklist administration, 3) professional coaching, 4) universal prevention interventions, 5) group therapy, 6) individual therapy, 7) best practices training, and 8) case management through interagency.

Regional coordinators, school-based mental health clinicians with advanced degrees and experiences in working with youth with mental health problems, are placed within each school building. These regional coordinators provide support in administration of the tri-annual teacher and student checklist assessments, support in interpreting the data, consultation with problem solving teams in determining universal, selective, and individualized supports for students, and support through implementing direct services to youth in school buildings.

The visual on the next page indicates where regional coordinators are placed across districts for the 2018-2019 school year.

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Boone County Schools Mental Health Coalition: 2018 – 2019 Regional Coordinator Assignments

Christa Copeland, M.Ed., M.A. Cbhgg6@missouri.edu	**Jessica Burbridge, M.Ed.** bubridgej@missouri.edu	**Dennisa Divine, LMSW** divined@missouri.edu	**Tara Collier, MSW** Colliertl@missouri.edu
Blue Ridge Elementary	*Centralia School District	*Harrisburg School District	Beulah Ralph Elementary
Derby Ridge Elementary	*Sturgeon School District	Two Mile Prairie	West Elementary
Oakland Middle	Midway Heights Elementary	Cedar Ridge	Paxton Keeley Elementary
Gentry Middle		Fairview Elementary	West Middle
			Battle High

Lindsay Oetker, LCSW Oetkerl@missouri.edu	**Jenna Strawhun, Ph.D., PLP** strawhunj@missouri.edu	**Becky Hart, LMSW** Hartrl@missouri.edu
Grant Elementary	*Hallsville School District	*Southern Boone School District
Locus Street Elementary	Lange Middle School	Rock Bridge Elementary
Mill Creek Elementary	Douglass High School	Parkade Elementary
Jefferson Middle	Hickman High	Rock Bridge High School
Smithton Middle	Russell Boulevard	
Ridgeway Elementary		

Shannon Holmes, Ph.D., PLP holmessr@missouri.edu	**Tyler Smith, Ph.D.** smithtyle@missouri.edu	**Chynna McCall, Ph.D.** mccallC@missouri.edu
Alpha Hart Elementary	Battle Elementary	Center on Responsive Education (CORE)
Benton Elementary	New Haven Elementary	
	Tolton High School	
Shepard Elementary		

Lou Ann Tanner-Jones, Ph.D., NCSP Director tannerjonesl@missouri.edu	**Sarah Owens, Ph.D., NCSP Associate Director** owenssar@missouri.edu
*Private and Parochial Schools	

Note: * indicated all schools in district

In August 2018, we hired three full-time regional coordinators to join our team.

- **Christa Copeland, M.Ed, M.A.,** is a doctoral candidate in the School Psychology program at the University of Missouri. She will be working as a full time coordinator as she completes her final requirements for her doctoral degree. Christa comes to the team with experience in working in mental health organizations such as the Family Access Center of Excellence (FACE) and the Center for Evidence-Based Youth Mental Health at the University of Missouri. In addition, Christa is a former special education teacher.
- **Jessica Burbridge, M.Ed.,** is a former school counselor. Jessica has been a strong school partner for the Coalition as she previously worked as a school counselor in our participating Harrisburg School District. Jessica brings a wealth of experience working in the schools. Prior to working as a school counselor, Jessica coordinated the Parents as Teachers program in Harrisburg.
- **Dennisa Divine, MSW** brings experience working in at-risk buildings in the Columbia Public Schools. As a former Coalition practicum student, we are excited to bring Dennisa back to the team.

In addition, a new Institute of Education Sciences (IES) funded postdoctoral fellow joined our team. **Dr. Chynna McCall** has her doctorate in school psychology. Most recently she was working as a school psychologist at an alternative school in Colorado. She will work with BCSMHC at CORE as a coordinator and continuing our strong partnership with the Motivational Interviewing with At-risk Students (MARS) program that has been successfully implemented at CORE across the tenure of the BCSMHC. The MARS program started in 2016 and has served students at CORE each year since. Each student receives a graduate student mentor who works with them weekly. **Dr. Tyler Smith**, also funded by the IES postdoctoral training grant will continue his work in his assigned schools.

New School to Coalition:

In August 2018, Coalition staff approached the newly appointed head of school of Columbia's Fr. Tolton Catholic High School, Mrs. Gwendolyn Roche, and introduced the work of the BCSMHC. Mrs. Roche and her staff were immediately interested in joining the Coalition, in conducting student and teacher checklists to determine staff and student needs and wished to obtain the support of Regional Coordinators in implementing evidence based interventions along with receiving professional development. The Tolton community also benefitted from Coalition staff providing linkages to a wide variety of community resources such as the MU Bridge Program, Burrell Behavioral Health Services and the Family Access Center of Excellence (FACE) of Boone County, to name a few.

Our work in Tolton started right away and they have become a strong Coalition partner.

In addition to Tolton, at the end of 2018, the Director contacted the administrator of Christian Fellowship School, Mr. Scott Williams, to offer a re-introduction to the Coalition (first introduced in summer of 2015) and to review the supports available through a partnership with us. The introduction meeting with staff has occurred and progress will be reported in the next project report.

The following provides a summary of activities for a series of goals for this school year. The current report provides information on work between January-December 2018

Program Service Area: Boone County Schools Mental Health Coalition (BCSMHC)-Teacher Checklist

Teacher checklist data were gathered three times between October and May of the 2017-2018 school year at all schools. Data are presented for the three administrations that occurred within the window of this funding cycle. Teachers reported on students' grades K to 12 on indicators related to academic competence, attention, peer relationships, social skills, internalizing problems, externalizing and self-regulation problems, and high-risk indicators such as bullying and suicidal ideation.

Given the funding for the Coalition is no aligned with the academic school year, two rounds of checklist data occurred prior to summer break. In January 2018 a total of **23,409** students were assessed. In April 2018, a total of **25,093** students were assessed. These data were immediately available after each round to schools for use toward guiding interventions via the clinical dashboard system. All schools in the county completed the teacher checklist three times across the academic year.

When students returned for the fall semester, the checklist was administered. In September 2018, a total of **23,937** students were assessed.

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Program Service Area:
Boone County Schools Mental Health Coalition (BCSMHC)-Student Checklist

The student checklist was completed with all students' in grades 3 to 12. The administration occurred at the same time as the teacher checklist in each school building. Regional coordinators, counselors, and teachers administered the student checklist to all students. Administration protocols and scripts were developed and administrators read the script as students complete the assessment to ensure standard administration to all students. Each question was read aloud, with definitions for items needing additional explanation. On average the student assessment takes between 7 and 15 minutes to complete. Feedback indicates that students seem to understand the items and feel comfortable answering the items.

In January 2018, **15,355** students in grades 3 to 12 completed the student checklist. In April of 2018, **14,917** students completed the checklist. These data were provided back to the schools to guide interventions.

In the fall when student returned from summer break, a total of **16,354** students completed the Student Checklist.

Quality Improvement: The Coalition worked with school administrators to set specific dates for administration (October, January, and April) to ensure school were aware of the timing of checklist administration and to avoid the checklist being conducted too close to the end of the year. These data collection points were very thoughtfully determined as the second and third administration occur after students have been on break and during times of the year when students often present increased risk.

Effectiveness of Solutions: The most recent administration of the Student Checklist and use of proposed solutions appears to have had a positive impact on the overall number of completed checklists as the total student checklists complete is the highest, of any cycle across the past 3.5 years. This number reflects **97.2%** of students in all districts as having completed the Student Checklist in September.

Quality Improvement: An additional observation of feedback received from key stakeholders is that students, particularly secondary students, may have less interest in completing the student checklist as the school year progressed.

Solutions: Last year, Dr. Reinke attended a meeting with Dr. Stiepleman and his high school advisory committee made up of high school students from every building in Columbia Public Schools. During the meeting Dr. Reinke ask the students about concerns, questions, or

suggestions they had regarding the about the checklist. During the discussion the students brought up that they had never received a specific explanation of the purpose or use of the checklist data. As a result, a written explanation to students was included in January 2018 administration of the student checklist. In addition, there was discussion of finding ways for high school student groups to use the aggregated data to inform student initiatives around improving student mental health. As such, we have worked to have student groups receive and review the data in our high school buildings to better include them in the process.

In the current 2018-2019 academic year, Coalition staff has continued to partner with schools to engage students in increasing their understanding of what the checklist is, how it can be used, and how they may benefit from participating in the Checklist. Below are examples of how our school staff and Coalition have successfully engaged students in this feat:

Case Example #1: Sharing Data with Hickman High School

On January 9th and 10th, 2019, Dr. Jenna Strawhun and several other BCSMHC regional coordinators presented building-level student checklist data to **approximately 900 students** at Hickman High School. The regional coordinators also had a discussion with these 9th and 10th grade students regarding the history and purpose of the checklist, as well as interventions that the checklist data is currently informing at Hickman. These interventions include identifying students for the Check and Connect program, identifying students for small group counseling, and developing building-level interventions to target attention and executive functioning. Students were also asked to give feedback on the use of checklist data at Hickman. Several students reported that teachers should be made more aware of the data and its uses throughout the building. Other students suggested including more mental health awareness presentations or speakers on mental health issues into the assembly schedule. Students also recommended sharing the building-level data with parents via the school website or a newsletter. Finally, some students reported wanting more of an opportunity to include open-ended comments on the checklist through the use of a comment box or open-ended response box. Dr. Strawhun has a plan to meet with the director of counseling at Hickman to review these recommendations and determine feasible next steps.

Coalition staff offered students an opportunity to provide anecdotal feedback on the Checklist system. Below is a selection of comments that encompass positive praise, in addition to, feedback for areas of improvement.

Praise from Students

"Your job is appreciated. Thank you for helping us!"
"Help students understand the importance of the survey. Some students don't seem to care about the survey despite its helpfulness"
"I like what you guys are doing because it helps people but teens don't like sharing so try to be more helpful with that."
"You guys are doing awesome things for us!!"
"Keep on, keepin' on, thanks for all the work you do!"
"I think you are doing well"

Feedback for Improvement from Students

"Try and make the survey more engaging, not like robot questions"
"Try to get rid of the negative stigma around the checklist. Try to make sure that people who answer truthfully about mental health don't get in trouble."
"Add a place at the end of the survey for students to explain why they may not like school or themselves so the problem can be found out."
"Can you offer a mental health first aid course to teachers?"
"There is a lot of stress when you are dragged to guidance. Better approach for asking about mental health is appreciated."
"Start some all-school motivation talks, like TED talks or talks from successful alumni to help with motivation."
"Don't make kids who have already been called down to the counselor for the test go again. Raise the criteria for what you deem 'unhealthy'"
"Ask questions about where most of the bullying occurs (e.g., bathroom, hallway, lunch, class)"
"Have a section where students can add sentences about their own concerns."
"Have a focus group"

Case Example #2: Rock Bridge High School Newspaper Student

Regional coordinator met with a senior at Rock Bridge High School to review checklist data. This meeting came about after this student wrote an article for her school newspaper discussing the checklist. The article titled "Coalition Checklist offers meaning, could employee revisions", talked about how the checklist could allow for students to give more specific answers to express their mental health concerns. Regional coordinator set up a meeting with this student to discuss the checklist results and ask for suggestion regarding sharing the data with other students and providing interventions. Student stated that she has heard peers in the classroom

stating that the checklist is “dumb” or that they are not going to fill it out honestly. However, when showing the student the building and grade level data from the student report, she was surprised that there was risk reported by students across several domain. Student stated that this information would be helpful to share with other students as it shows that people experiencing risk are not alone. Student did not have specific suggestions regarding how to share this data, or how to offer interventions to students who reported risk.

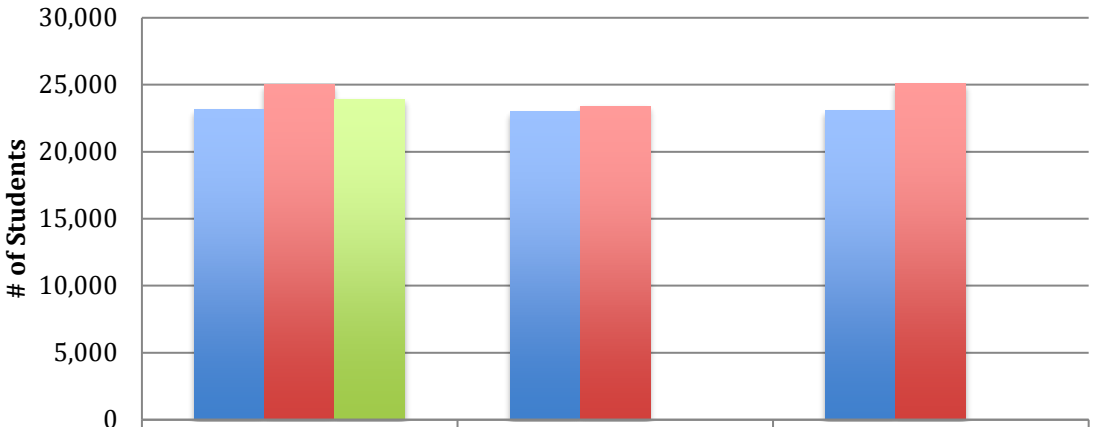
Case Example #3: Sturgeon High School Student Data Discussions

Regional Coordinator, Jessica Burbridge, and school counselor at Sturgeon High School, Matt Boyer shared building level and grade level student checklist data with all students. Jessica and Matt met with each grade level separately to facilitate discussions about the checklist, the use of data, and generate feedback from students. Students asked questions and shared feedback during the presentations. The counselor also sent out a follow up survey to give students an opportunity to provide feedback in that way as well. The counselor and regional coordinator used the checklist data and feedback from students to inform discussions with teachers and administrators, make decisions, and design lessons for students.

Overall Effectiveness of Solutions:

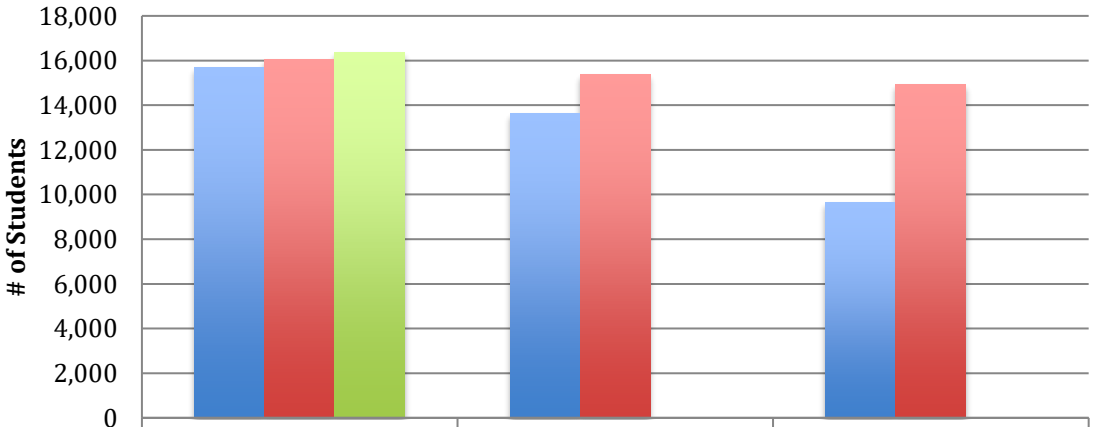
Figures 1 and 2 demonstrates an increase of teacher and student checklists completed across the 2016-2017, 2017-2018, and current school years. Each administration demonstrates an increase in the total number of students screened by each checklist indicating the solutions implemented are effective in ensuring maximum participation across schools.

Figure 1. Teacher Checklist by Year and Cycle



	Fall	Winter	Spring
16-17	23,132	23,041	23,069
17-18	25,034	23,409	25,093
18-19	23,937		

Figure 2. Student Checklist by Year and Cycle



	Fall	Winter	Spring
16-17	15,698	13,617	9,642
17-18	16,026	15,355	14,917
18-19	16,354		

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In addition to successfully screening students via the Teacher and Student Checklist, it is imperative that the checklist data is a) shared, b) reviewed, and c) utilized to implement appropriate interventions to address identified risk. Below, progress towards these three goals is detailed for the current funding cycle. In order to evaluate school use of the data, the Coalition completes a brief 'Fidelity to the BCSMHC Model' rating for each school. Items on the Fidelity measure assess critical components listed above, among others. In addition to Coalition completion of the Fidelity measure, we have begun to provide feedback to school partners on progress of implement core components of the model and have piloted the completion of the fidelity tool with key stakeholders at each school.

Target: Schools will screen students in their buildings using the Boone County Schools Mental Health Coalition Checklist

- Goal: 100% of teachers will complete the checklist three times per year.
    - **100%** of schools completed the teacher checklist and all students were screened by at least one teacher. We continue to demonstrate growth in the completion rates by teacher. Schools make determinations on how many core and non-core teachers participate in the checklist

Target: School problem solving teams and school counselors will receive the data after each cycle

- Goal: 100% of school problem solving teams and school counselors will receive the data after each cycle
    - **100%** of school problem solving teams and school counselors received the data after each cycle

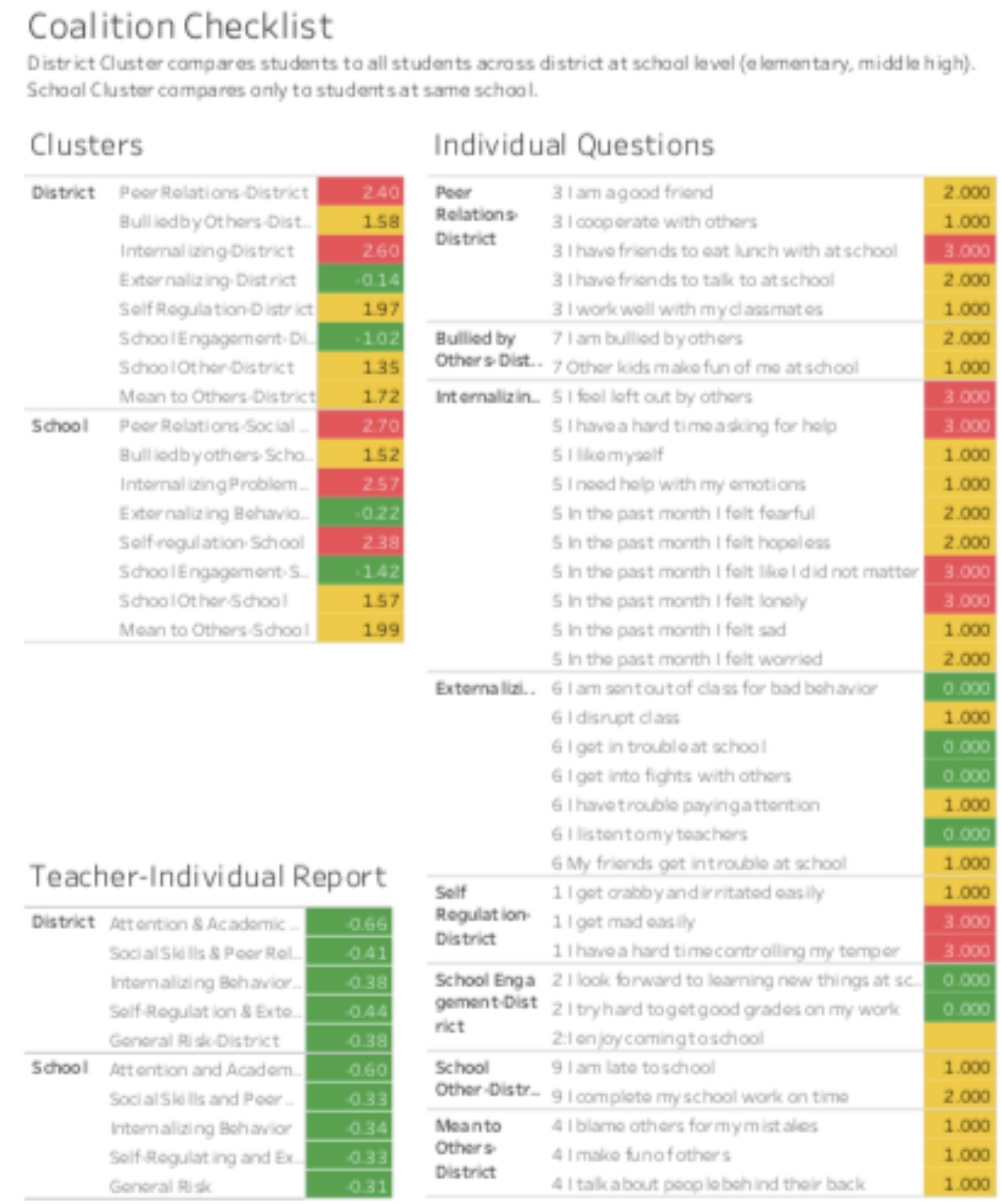
Target: School problem solving teams and school counselors will review the data after each cycle

- Goal: 100% of school problem solving teams and counselor will review the data after each cycle.
    - **100% (54/54)** of schools and coordinators reported reviewing the checklist data during the Fall 2018 checklist
    - **94% (51/54)** of schools and coordinators reported reviewing the checklist
    - Comparatively, **96% (52/54)** of principals reviewed checklist data
    - **60% (32/54)** of schools reported that student level checklist data was utilized during problem solving teams.

Quality Improvement: As noted above, some schools and/or school professionals are reported to not partake in the review of data, to our knowledge. In particular, it is noted that principals and problem-solving teams have lower rates of reviewing the checklist data. It should be noted that some schools do not currently have problem solving teams. For example, a survey of CPS indicates a total of 10 elementary schools that do not have regularly meeting problem solving teams. However, principals continue to utilize or review the checklist data less frequently than counselors or coordinators.

Solutions: One step towards increasing the utilization and review of checklist data by principals and administrators, particularly in Columbia Public Schools where these rates are lowest, have been established through the integration of checklist data into CPS systems data servers. The Coalition has worked with Dr. Dave Wilson, Director Assessment, Intervention, and Data to incorporate the checklist data into an already existing data dashboard that will be disseminated to principals and administrators in the 2018-2019 school year. In particular, we hope this will increase the likelihood that principals can not only review the data within their current systems, but also consider the data in context of other individual ad building level data. We are hopeful that this step will increase accessibility and likelihood of use in the upcoming school year for administrators. A sample of Coalition data's integration in the CPS Tableau server is provided in the Figure below. Beyond this, the Coalition has partnered with the Regular Education Behavior Support Specialists in CPS to collaborate and align practices. We meet monthly with leaders from this team and invited special education members to discuss common barriers and solutions. As such, the most recent meeting resulted in surveying stakeholders on each school's problem-solving team process and gathering a common list to be shared and communicated to key administration. It is critical that schools utilize the checklist data, and other data, in a problem solving process/team to put interventions into place and monitor interventions already in process, to achieve student outcomes.

Figure 3. Coalition Checklist Data Via Tableau



Coalition Checklist

District Cluster compares students to all students across district at school level (elementary, middle high). School Cluster compares only to students at same school.

Clusters

District	Peer Relations-District	2.40
	Bullied by Others-Dist...	1.58
	Internalizing-District	2.60
	Externalizing-District	-0.14
	Self Regulation-District	1.97
	School Engagement-Di...	-1.02
	School Other-District	1.35
	Mean to Others-District	1.72
School	Peer Relations-Social ...	2.70
	Bullied by others-Scho...	1.52
	Internalizing Problem...	2.57
	Externalizing Behavio...	-0.22
	Self-regulation-School	2.38
	School Engagement-S...	-1.42
	School Other-School	1.57
	Mean to Others-School	1.99

Individual Questions

Peer Relations-District	3 I am a good friend	2.000
	3 I cooperate with others	1.000
	3 I have friends to eat lunch with at school	3.000
	3 I have friends to talk to at school	2.000
	3 I work well with my classmates	1.000
Bullied by Others-Dist...	7 I am bullied by others	2.000
	7 Other kids make fun of me at school	1.000
Internalizin...	5 I feel left out by others	3.000
	5 I have a hard time asking for help	3.000
	5 I like myself	1.000
	5 I need help with my emotions	1.000
	5 In the past month I felt fearful	2.000
	5 In the past month I felt hopeless	2.000
	5 In the past month I felt like I did not matter	3.000
	5 In the past month I felt lonely	3.000
	5 In the past month I felt sad	1.000
	5 In the past month I felt worried	2.000
Externalizi...	6 I am sent out of class for bad behavior	0.000
	6 I disrupt class	1.000
	6 I get in trouble at school	0.000
	6 I get into fights with others	0.000
	6 I have trouble paying attention	1.000
	6 I listen to my teachers	0.000
	6 My friends get in trouble at school	1.000
Self Regulation-District	1 I get crabby and irritated easily	1.000
	1 I get mad easily	3.000
	1 I have a hard time controlling my temper	3.000
School Engagement-District	2 I look forward to learning new things at sc...	0.000
	2 I try hard to get good grades on my work	0.000
	2 I enjoy coming to school	
School Other-Distr...	9 I am late to school	1.000
	9 I complete my school work on time	2.000
Mean to Others-District	4 I blame others for my mistakes	1.000
	4 I make fun of others	1.000
	4 I talk about people behind their back	1.000

Teacher-Individual Report

District	Attention & Academic ...	-0.66
	Social Skills & Peer Rel...	-0.41
	Internalizing Behavior...	-0.38
	Self-Regulation & Exte...	-0.44
	General Risk-District	-0.38
School	Attention and Academ...	-0.60
	Social Skills and Peer ...	-0.33
	Internalizing Behavior	-0.34
	Self-Regulating and Ex...	-0.33
	General Risk	-0.31

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Target: Students who are at-risk or in-risk will be identified by the Boone County Schools Mental Health Coalition Checklist

- Goal: 80% of students in need of supports will be referred for services or receive a school-based intervention
- One of the primary goals of the Coalition's work with schools is to ensure that all students identified as at-risk or in-risk are provided support via targeted or individualized interventions that match their identified need and level of risk. This is achieved through previously described activities such as: small group interventions, problem solving team plans, collaboration with schools and families to link students to outside resources, among other activities. Coalition coordinators have worked with a subset of schools to comprehensively track and document school-based services and referrals for students identified as at or in risk by the checklists. Coordinators strive to meet regularly and collaboratively document these services in a manner that is feasible for schools. When these data were gathered in April, 2018, coordinators were successful in documenting provided services for all identified students at 16 of the county's schools. Of the 16 schools, a total of 1,527 students were identified as at or in-risk. Of the 1,527 identified, **1,205 students or 79%,** were referred for services or receiving school-based interventions.

Quality Improvement: While regional coordinators are integral in provision of services to at-risk students, they are not the only mental health providers in schools. Thus, they are not always aware of all the services provided to students in school buildings. The subset of data gathered in April 2018, represents a small subset of our schools. Working with schools to effectively document all services provided to students has posed a challenge due to the variety of stakeholders and systems used within each school. We hope to work with schools in the 2018-2019 academic year to better document and account for school-based services.

Solutions: We continue to collaborate with school counselors and administrators, share the results of this process, and plan for continued use to bring more representation of and valid data.

Target: Schools will share their data with teachers in the building

- Goal: 80% of schools will share the data with their teachers
    - According to the coordinators, **76% (41/54)** of schools shared checklist data with school staff.

Quality Improvement: Rates reported by school partners indicated higher levels of dissemination of checklist data to teachers. Despite this, consumer satisfaction surveys (below) still indicate many teachers report never seeing checklist data.

Solutions: It is imperative that teachers and school staff both have the chance to review and use the checklist data. This information will be shared with schools to provide feedback on low rates. The Coalition received extensive training this summer in sharing both checklist data and the results of implemented interventions with relevant school staff to improve the feedback loop of collected data. Additionally, we will provide feedback to superintendents of reported fidelity and brainstorm potential solutions. **See more solutions below in the consumer satisfaction section of the report.**

Program Service Area: Professional Coaching

The BCSMHC provides professional coaching to school staff through systems level consultation, teacher consultation, data reviews, and problem-solving teams. System level consultation consists of consulting with school staff to improve school practices addressing a specific risk area through the implementation of an intervention or planning of intervention(s) (e.g., PBIS meetings, planning school wide intervention, consulting about universal interventions in place). Teacher consultation consists of consulting with teachers with how to support students or how to improve their classroom (e.g., consulting about classroom component of a behavior plan, discussing the use of classroom management practices to improve universals in classroom, and implementing the Classroom Check-up, a consultation model to support teachers in use of effective classroom management practices). Problem Solving Team consultation consists of participating in problem solving team meetings within school buildings to support student social, emotional, behavioral, and/or academic needs.

Determining Effectiveness

Target: Schools who utilize professional coaching will implement at least one evidenced base intervention for students at at-risk

- Goal: 80% of schools who use consultation will implement one or more evidence-based intervention for targeted areas of risk identified by the BCSMHC checklist.
- According to school report, **100% of schools indicate implementing an evidence-based universal, selected, or indicated intervention.**

<u>Target:</u> School staff will receive support developing and implementing behavior support plans to students at/in risk.

- <u>Goal:</u> 70% of students with behavior support plans will demonstrate a decrease in behavior problems.
- **72% (59/82) of** students with behavior support plans demonstrated a decrease in behavior problems.

Determining Effectiveness: Progress monitoring data is used to evaluate the effectiveness of individualized behavior supports for students. Specifically, a Direct Behavior Rating (DBR; Chafouleas & Riley-Tillman) as a method to capture progress across three global areas of student behavior: Respectful Behavior, Disruptive Behavior, and Academic Engagement. The DBR asks teachers to provide a rating of the estimation of time students engaged in each of three behaviors. The DBR is a strong choice for progress monitoring due to its high level of technical adequacy, ability to monitor progress across a variety of behaviors with no manipulation of response type, and high level of ease and completion and acceptability by teachers. In particular, progress monitoring can occur daily or weekly and research indicates difficulty-engaging teachers in regular completion of progress monitoring without intensive support. Without completion of progress monitoring measurement, effectiveness of student's most intensive interventions are not properly monitored and therefore will be unlikely to maximize benefits and progress.

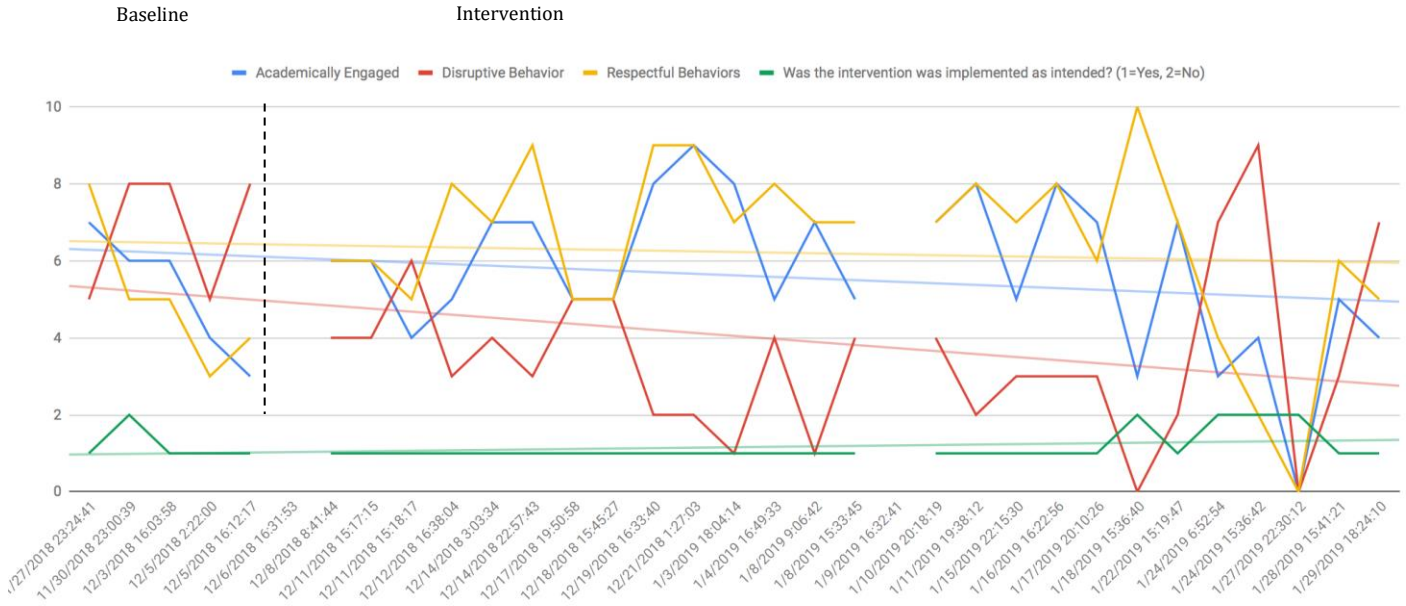
Progress Monitoring of Individualized Function-based Interventions

Individualized supports in the form of daily, function-based interventions account for the majority of individualized supports that are ongoing. To evaluate intensive function-based interventions, DBR was completed by student's teacher(s) daily. Visual examination of the data, including trend, level, and immediacy of change are regularly monitored and examined to determine if students are making adequate progress towards individualized goals or there is a need for change to a plan.

A total of 82 students received intensive individualized behavior interventions that were adequately progress monitored using the Daily Behavior Rating, **72% (59/82) of the students demonstrated improvements** based on teacher report of DBR data as evidenced by an increase in academic engagement and respectful behavior and/or a reduction in disruptive behavior. Of the students that demonstrated stagnant progress, all interventions have continued to be modified as a result of slow progress or declines. An example of progress monitoring of an individualized support is provided below in Figure 4.

Progress monitoring is a time and resource intensive process that requires school staff to rate students daily and teams to monitor and review staff ratings in a systematic format regularly (e.g., daily or weekly). The intention of progress monitoring is to monitor intervention effectiveness in a manner that allows for ongoing decision-making and modifications to interventions quickly and efficiently. The total number of students that were monitored and are reported above represent an increase from previous reporting cycles. In particular, our team has used a new system to increase the number of staff ratings in a feasible manner and use of these data during teams in a non-intrusive, efficient manner. We are eager to see student improvements as a result of the continued use of these systems in the upcoming school year.

Figure 4. Progress Monitoring Effectiveness Example



Professional Coaching was provided to a total of **609 unique individuals.** These individuals included a range of school staff including: administrators, counselors, general and special educators, support staff, etc. Often time professional coaching occurs in problems solving teams which include six or more school personnel.

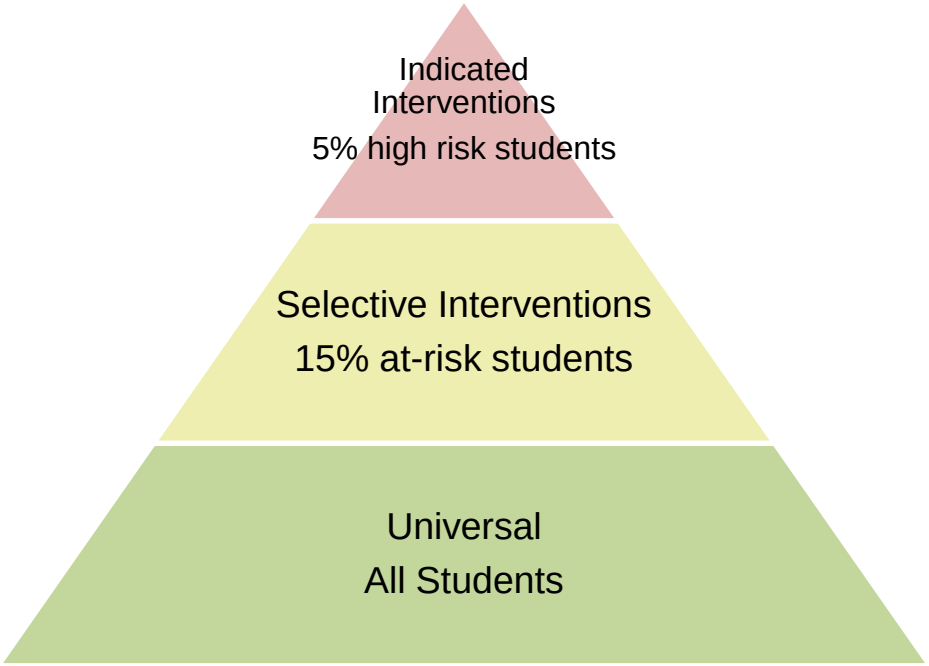
Boone County Schools Mental Health Coalition

Intervention Services Provided

As a result of the checklist data approximately **4,600 youth have received an intervention** to support their social behavioral or emotional health since the January 2018. Below, we provide summaries of the number of youths across the 54 school buildings in the Coalition who received an evidence-based intervention or were connected to appropriate outside resources based on data from the teacher or student checklist. The numbers are broken down by elementary, middle, and high school. In addition, the target area of the intervention is provided. Lastly, the level of the intervention for students within each target area is provided.

- Universal indicates that a school-wide, class-wide, or grade-level intervention was provided.
- Selective interventions are more intensive and occur with a smaller group of students.
- Indicated interventions are the most intensive and are at the individual level.

Figure 5. Public Health Approach to School-based Mental Health Supports



Note: The interventions were directly linked to data gathered from the teacher and student checklists. The following provides detailed information about the purpose and skills targeted by each intervention focus area.

Focus Areas:

- **Attention and Academic Competence** interventions focus on increasing executive functioning, on-task behavior, planning, and organizational skills in youth.
- **Peer Relations and Social Skills** interventions focus on increasing relationship, communication, and problem-solving skills and reducing bullying behaviors among youth.
- **Internalizing Problems** interventions focus on using cognitive behavioral strategies for decreasing anxiety and/ or depressive symptoms in youth as well as improving self-esteem.
- **Self-regulation and Externalizing** interventions focus on impulse control, goal setting, problem solving, emotion recognition, and anger control strategies to decrease disruptive, impulsive, and aggressive behaviors in youth.
- **School Engagement** interventions focus on building relationships with adults, supporting student motivation to be successful in school, and making school and course content meaningful and relevant

Note: The Coalition has manualized evidence-based strategies and interventions that can be feasibly implemented in school settings. The manual provides a menu of options for universal, selective, and indicated interventions from which schools can choose to select and implement in their schools. All regional coordinators have access to the manual and evidence-based interventions recommended in the manual.

Program Service Area: Universal Intervention

During checklist reviews, regional coordinators utilize school level data to determine if the level of risk in a school building or classroom would best be addressed by a universal intervention. Through a universal intervention, school staff members are trained in the chosen intervention. Regional coordinators provide continuous consultation throughout intervention implementation regarding scheduling, materials, fidelity to o the intervention, as well as measurement of effectiveness of the intervention.

Across the county, **6459 students** have received at least one universal intervention through the supports of regional coordinators. Throughout this last year, the BCSMHC has help several school buildings and classrooms implement universal interventions. One example is *Second Step*. *Second Step* is a manualized evidence-based social skills curriculum that can be taught by classroom teachers. Through the 25 lessons, *Second Step* strengthens a student's social-

emotional skills by in-classroom lessons taught once a week in addition to daily activities. This universal intervention works on helping students to better manage their emotions while also learning how to properly control their reactions. By improving upon students' social-emotional skills, students begin to be aware of others' feelings and better their problem solving and decision-making skills. For more information on Second Step, visit (https://www.secondstep.org). An added benefit to the implementation of Second Step in schools is the newly embraced Second Step Bully Prevention curriculum that can stand alone or supplement the core curriculum Recently, Columbia Public Schools, elementary counselors, have begun implementing this Bully Prevention curriculum, district wide. The match of materials ultimately benefits students as they are exposed to the same terminology and principles. Beyond this, Columbia Public Schools elementary counselors continue to the use the Second Step Child Abuse and Neglect prevention package. Together, the three curriculums provide a well-rounded prevention-based intervention that should yield strong results in future years. WE continue to gather information about what school utilize curriculums and are eager to evaluate long-term 9mpact of these interventions across future school years.

Universal Intervention Example: Classroom Check-Up

Our staff has continued training in the implementation of a universal consultation support for classroom manage, the Classroom Check-up (Reinke, Herman, & Sprick, 2011). The Classroom Check- Up (CCU) is a consultation method for supporting teachers in the improvement and use of evidence-based classroom management techniques to improve overall student engagement and academic achievement in the classroom. Coalition coordinators have worked with teachers to assess their classroom and develop plans/interventions to implement that benefit all students via teacher implementation of behavior management strategies and effective instruction. Some schools have utilized grade level checklist data to identify grade levels that demonstrate a need for improved classroom management and provided CCU support to these teachers. Some schools have elected to provide CCU in a rotating basis to all first-year teachers, teachers that have requests behavior management support, or those identified by administrators as a teacher that may benefit. As a result, interventions have been implementing including: The Good Behavior Game, an evidence-based intervention for increasing classroom based self-regulation, interventions to implement new class wide-routines, and strategies to improve overall classroom engagement. Coordinators and school personnel that have been trained in the use of the CCU consultation model utilize the www.ClassroomCheckUp.org/ website as a coach that provides resources, training videos, and materials to support teachers. More information about CCU can be accessed through an overview brief on the Evidence Based Interventions (EBI) Network site: (http://ebi.missouri.edu/wp-content/uploads/2016/06/CCU-Brief.pdf)

Determining Effectiveness

The results below demonstrate effectiveness from the previous academic year (Jan-May 2018). At this point, universal interventions have begun implementation for the current school year. To assess effectiveness, we must utilize future checklist results to monitor growth. We are currently in midst of our second round of Checklist screening and will gather more results in April. We are eager to evaluate and present results of 2018-2019 universal interventions at the conclusion of this school year.

Target: Schools implementing universal interventions in their building will demonstrate a decrease in the percentage of students who exhibit risk indicators in the targeted domains.

- Goal: Students who do not have risk in the targeted domain will continue to show no risk and 10% of students who have risk in the targeted domain will no longer be at risk post intervention.

The universal interventions implemented focused mostly on improving student attention, self-regulation, social skills, and reducing externalizing problems. Thus, these areas were of focus for these analyses. Table 1 demonstrates changes in risk across these domains from fall checklist administration to end of year checklist administration.

Overall, some students who started as having risk had no risk at the end of the year (range 9-60%), whereas low percentages of students who had no risk at the start of the year demonstrated risk at the end of the year (range 2-4%). With regard to teacher report of externalizing problems, teachers did not report improvements in this area (0%) but nearly half of students with risk (49%) self-reported improvements in this area.

Table 1. Changes in Risk across Schools Implementing Universal Interventions 2017-2018 Academic School Year.

Risk Area	Students Improved	Students who Develop Risk
Teacher Report: Attention Problems	57%	3%
Teacher Report: Social Skills Problems	5%	4%
Teacher Report: Externalizing Problems	0%	3%
Student Report: Externalizing Problems	49%	3%
Student Report: Social Skills	55%	3%
Student Report: Self-Regulation	23%	3%

Staff that implemented universal interventions were surveyed to assess their use of the universal intervention, belief that the intervention was helpful to students, and their likelihood of implementing the intervention in the future. Of the staff surveyed between January and December of 2018, 98 staff responded to the survey. Of the respondents, **94% (92/98)** indicated that they used the intervention and believed it to be helpful for students. In addition, **92% (90/98)** plan to use the intervention in the future.

These data are promising. Specifically, the goal of training and coaching school personnel use of intervention is to build their capacity to use these interventions independently in the future. These data suggest that staff implemented interventions with appropriate follow through and found the intervention to be worthwhile and feasible to continue implementation. We will work to increase the number of respondents to this survey through improvements in the mechanisms for administering follow-up surveys in the future. Many of our universal interventions have only recently begun implementation in the Fall, we are eager to follow up with new implementers of universal interventions to gather more information about continued use of said interventions.

Table 2. Universal Interventions by Domain

Focus of Intervention	Level	# of Students
Attention & Academic Competence	Elementary	123
	Middle	1,510
	High	0
Peer Relations & Social Skills	Elementary	559
	Middle	31
	High	32
Internalizing Problems	Elementary	40
	Middle	297
	High	0
Self-Regulation & Externalizing Problems	Elementary	3,392
	Middle	446
	High	3
School Engagement	Elementary	0
	Middle	0
	High	26
Total Since January 2018		6,459

Boone County Schools Mental Health Coalition

Program Service Area: Group Therapy Child

BCSMHC regional coordinators provide group therapy to students by utilizing evidence-based curriculums and interventions. Students are chosen based on risk level as assessed by the teacher and/or student checklist data. Groups are formed based on areas of risk (self-regulation, social skills, etc.).

We have provided selective interventions based on the screening data to **541 students** since January 2018. School counselors, particularly with the new student report data, are becoming more active in using these data to form groups and implement groups with students. **100% of counselors indicated they have reviewed the checklist data and many groups implemented were selected collaboratively between regional coordinators and counselors**.

The data below may not adequately reflect the number of students who are receiving services as a result of the screening data in schools. These data are only those groups for which regional coordinators helped to coordinate or implement. We expect many more students have received services as a result of screening data. We continue to collaborate with counselors to build systems and infrastructure to document how many students receive services through school counselors as a result of these data as well as working to support school counselors in gathering pre-post data on these groups to determine the efficacy of the groups they implement. This is an ongoing area of growth that we are invested in supporting.

Table 3. Group Therapy Interventions Provided by Domain

Focus of Intervention	Level	# of Students
Attention & Academic Competence	Elementary	7
	Middle	2
	High	1
Peer Relations & Social Skills	Elementary	150
	Middle	37
	High	1
Internalizing Problems	Elementary	42
	Middle	61
	High	55
Self-Regulation & Externalizing Problems	Elementary	95
	Middle	45
	High	12
School Engagement	Elementary	10
	Middle	2
	High	21
Total Since January 2018		**541**

Determining Effectiveness

The summary of pre-post data in the July report has not changed as many of the groups started in the 2018-2019 academic year are still in process and awaiting post data collection. These findings will be reported in the upcoming July mid-year report.

Fidelity of Implementation

Fidelity is defined as the 'degree to which interventions are implemented as intended' and is considered important and necessary. If an intervention is not implemented with fidelity and we find no effects the lack of impact is because the intervention was not actually implemented (not because the intervention did not work). Thus, levels of fidelity influence the effectiveness of interventions. The Coalition has begun use of a universal fidelity tool, the U-FIT, co-developed by Drs. Sarah Owens, Wendy Reinke, and Shannon Holmes, to measure and provide meaningful feedback to consumers about intervention implementation.

Since January 2018, we have refined our system based on user feedback. A specific feature that has been added to our system is a performance feedback mechanism for implementers. Specifically, fidelity scores can be entered into a system that provides immediate feedback to implementers with suggestions for improvements and student attendance and engagement data. This information is valuable in improving delivery of curriculum content in manners that we know, based on literature and research, is effective. For example, for skill based interventions, it is optimal for implementers to provide a) Instruction in the new skill; b) Appropriate models of the skill being used; c) Opportunities to practice the skill in multiple settings, and; d) Feedback on the use of the skill. If one of these components is missing or underutilized, our system will provide suggestions for ensuring its delivery as intended by skill based intervention manuals. See Figure 6 below for a visual example of the feedback provided by the system. Furthermore, Dr. Holmes received continued funding to support work around this tool, which is further detailed in the Products section of this report.

This is especially important for service areas #3 and #4 as lack of fidelity can often result in poor student outcomes. Many times, fidelity of implementation or student outcomes are not evaluated until the end of an intervention, thereby limiting the ability of an implementer to change delivery methods or intervention techniques throughout the course of the intervention. **Therefore, this method of feedback offers the ability for implementers to maximize student outcomes during the intervention, increasing cost effectiveness and, ultimately, positive student outcomes and limiting iatrogenic effects that could be prevented.**

Figure 6. Example Fidelity Feedback

Fidelity Dimension	Critical Component	Ave Rating	Recommendations
Engagement	Engagement	3	If rating is in the red or yellow, try: asking more questions of students related to content, increase use of praise to students who are engaged, catch students not engaged and praise them when they participate.
Adherence	Skill introduction	3	If rating is in the red or yellow, try:
	Skill promotion	4	If rating is in the red or yellow, try:
Quality of delivery of skill introduction components	Explicit instruction	3	If rating is in the red or yellow, try:
	Modeling	4	If rating is in the red or yellow, try:
	Practice	4	If rating is in the red or yellow, try:
	Feedback	3	If rating is in the red or yellow, try:
	Goals	5	If rating is in the red or yellow, try:
Quality of delivery of skill promotion components	Practice	1	If rating is in the red or yellow, try: set aside time during group to practice, use role-play to practice.
	Feedback	1	If rating is in the red or yellow, try: be sure to give positive feedback and discuss areas for improvement following each practice opportunity, ask students what they felt went well and what could be improved.
	Skill transfer	1	If rating is in the red or yellow, try: set aside a time for students to practice in authentic settings, provide teachers and parents with handout to monitor skills in classroom and at home.

Program Service Area: Individual Therapy Child

BCSMHC regional coordinators provide individual therapy to students by utilizing evidence-based curriculums and interventions. Students are chosen based on risk level as assessed by the teacher and/or student checklist data. The evidence-based intervention is determined by areas of risk (internalizing problems, etc.). Since January 2018, coordinators have worked with school staff to provide **397 individual students** with individual therapy. In the previous academic year, limited effectiveness data was able to be completed to evaluate impact of interventions. In the current year, individual therapy effectiveness is being tracked using the Tracker system, developed by Dr. Kristin Hawley, and the Coalition pre and post assessments. These systems monitor improvement in Top Problems identified by the student and family, and changes in behavior and mood functioning in an ongoing manner throughout individual sessions. Examples of both reports are provided below. Furthermore, student reports are combined with fidelity data to help make decisions based on implementation and appropriate next steps based on findings.

Table 4. Tier 3 Interventions Provided by Domain

Focus of Intervention	Level	# of Students
Attention & Academic Competence	Elementary	62
	Middle	8
	High	1
Peer Relations & Social Skills	Elementary	7
	Middle	0
	High	1
Internalizing Problems	Elementary	49
	Middle	119
	High	39
Self-Regulation & Externalizing Problems	Elementary	84
	Middle	17
	High	4
School Engagement	Elementary	4
	Middle	0
	High	2
Total Since July 2018		**397**

Boone County Schools Mental Health Coalition

Case Example: Show-Me FIRST Implementation

Following the Fall completion of the checklist, the coalition began piloting the implementation of an evidence-based intervention for middle school youth identified as at-risk for internalizing problems. FIRST is a flexible intervention appropriate for youth with a wide range of concerns. Students receive support practicing problem-solving, understanding emotions, relaxing their mind and body, challenging negative thoughts, and trying new or difficult things. Together, these skills compose a toolkit of coping strategies for student to use to manage their emotions and thoughts before, during, and after difficult situations.

In October 2018, Coalition staff were trained by Dr. Kristin Hawley and her team in the implementation of this intervention with youth in school. Since October, Coalition staff have collaborated with school staff to identify students that may benefit from the intervention in middle school. In particular, the Coalition staff identified students that were at-risk or in-risk in the Internalizing domain of the Student Checklist. Staff utilized a protocol to assess the level of risk the student had, supports students already had in place, and solicit student interest in receiving brief, individualized supports at school. A total of 48 students expressed interest and are currently participating in the FIRST intervention. Furthermore, staff will continue to use this protocol for selecting ideal students to receive this intervention in the Spring of 2019. It is anticipated that approximately 60 students will receive the FIRST intervention. To evaluate the effectiveness of providing this intervention to students at school in a brief, individualized format, each student completed a standardized pre and post assessment. Results will be compared for those that participated and we are eager to present the results of the intervention at the conclusion of this academic school year.

Determining Effectiveness:
A comprehensive evaluation of interventions will not be available until the conclusion of the academic school year. However, below is an example of reports we utilize to provide assessment results for students, families, and school personnel. All students participating in individual therapy will have an evaluation report that Coordinators can use with schools to determine if the intervention was effective, how the intervention was implemented (fidelity) or what was effective, and provide a planning page to guide recommendations or next steps for this student.

Program Service Area: Case Management

Since January 2018, **53 families** were referred for case management services. **26 of these families attended interagency meetings** and several families had multiple meetings, reaching a level that can be described as "system of care". These students received case management until they linked to community providers and they and their families received needed supports.

The other **27 families who did not attend interagency meetings** benefited from professional coaching activities and recommendations to their school administration, counseling, outreach staff and problem-solving team. **13 of the cases are ongoing** into the next reporting period.

Given the time required to effectively provide case management services, successfully redirecting families through professional coaching within the school and/or to problem-solving teams is a cost-effective strategy that demonstrates our ability to provide appropriate intensity of services.

Effectiveness of Case Management

- Of these families, **96% (25/26)** reported high levels of satisfaction with interagency meetings. Families reported that they appreciate the personal attention and goal setting provided prior to the meetings so that they might better achieve their desired outcomes in the interagency venue.
- Of the families who received case management services, **58% (15/26)** reported a reduction in the severity of problems identified by the Top Problems Assessment.
- **100% (26/26) of families reported or were reported to have attended at least one appointment/linked to a new provider or received additional/enhanced services through an existing provider.**
- Broadly, the services accessed by families were Burrell Behavioral Health (24) Great Circle campuses (8) and Boone County Family Resources (5). Other child and family serving agencies accessed by families as a result of this committee's work were: Children's Division, Juvenile Office, Compass Health/Pathways/Family Counseling Center, Love Inc., Consumer Credit Counseling, Columbia Housing Authority, Boone county schools which added services as appropriate, Family Access Center for Excellence (FACE), Missouri Psychiatric Center (MUPC), MU Bridge Program, Centerpointe Hospital, Royal Oaks, Boone Hospital, Private Practices, and related providers.
- **52% (14/27)** of families reported a reduction in stress
- **52% (14/27)** reported an improvement in their ability to cope.

Areas for improvement in this process:

More families stated or engaged in behavior in this reporting period that indicated they disliked the conversation to collect data on their levels of stress, coping and top problems. In several cases we were unable to engage the family past the initial interagency meeting so information about engagement (link to, or attend first session or receive more services) was obtained through interagency release of information with schools or agencies. Gaining information and ratings related to stress reduction and increased coping was also difficult.

The Coalition has consulted with agencies such as the FACE to explore mechanisms for collecting ratings in a non-aversive manner. Text messaging was requested by several families in this reporting period, in order for conversations to be quick, less detrimental to adults in employment situations and easy to do after-hours. Maintaining contact with families is crucial to effective case management; this is an area that warrants continued attention. Investigating and implementing acceptable ways to determine program effectiveness is a top priority for the upcoming school year.

Program Service Area: Best Practices Training

Since January 2018, we have trained approximately **943 individuals** in our Boone County schools in an array of topics related to areas of need identified by the checklist data or by school professionals. These topics have included training on specific interventions/curriculum including: 1) Second Step, 2) Check and Connect, and 3) Zones of Regulation, in addition to training on specialized topics such as: 1) Anxiety and Depression in Youth, 2). Making Use of Checklist Data, 3). Using a Suicide Risk Assessment, and 4). Student Success Teams.

Of those trained, approximately **60 students** in topics of Self Care related to mental health. Results from this training are highlighted below in Table 6.

Note: All presentations and materials are available on the Coalition website, http://bcschoolsmh.org/for-schools/training-resources/

Determining Effectiveness

Following each training, we request that staff provide feedback on their satisfaction and perceived improvement in knowledge on the topic. For the trainings conducted so far, this academic year (since July report), **98% (159/163) of reporting staff were moderately to extremely satisfied with the trainings**. On average across trainings, **58% (129/223) of individuals proving data reported an increase in knowledge** on the trained topics. Some topics

teachers and staff felt they were already fairly knowledgeable. This may be a result of staff receiving trainings on previously implemented interventions. This occurs regularly at the beginning of the school year to ensure that teachers are up to date and remember how to use curriculum in which they were previously trained, therefore, large increases in knowledge may not be observed. For example, 33 of a total reporting 121 individuals or approximately 20% of the total individuals trained, indicated they had received previous training in the particular content area. We will continue to work on building PDs to fit areas of need based on the screening data. We have discussed developing more "advanced" PDs and having teachers pass a knowledge test prior to moving upward through the PD topics.

In addition to surveying staff regarding their post training knowledge, we also follow-up with participants to ascertain how they are currently using and/or benefiting from the trainings received. All participants were emailed regarding current use of best practice trainings. Of the total staff, a total of 45 respondents provided feedback. According to our follow up survey, **87% (39/45) respondents indicated currently using skills or information they were trained to use or implement.** Furthermore, **91% (41/45) indicate that the skills they were trained to use are helping their students.**

Table 5. Feedback from Best Practice Training -School Personnel Attendees from July - December 2018

Items	Overall (n = 163)	
	Mean	**SD**
To what extent are you satisfied with the training you received and the practices covered?	4.25	0.83
How credible did you find the presenters?	4.64	0.59
How satisfied are you with the content of the training and the practices covered?	4.35	0.79
How familiar/knowledgeable were you of the skills trained today BEFORE the professional development session?	3.46	1.13
How familiar/knowledgeable were you of the skills trained today AFTER the professional development session?	4.23	0.82

Note: Higher scores are better. Range for scoring was 1 to 5.

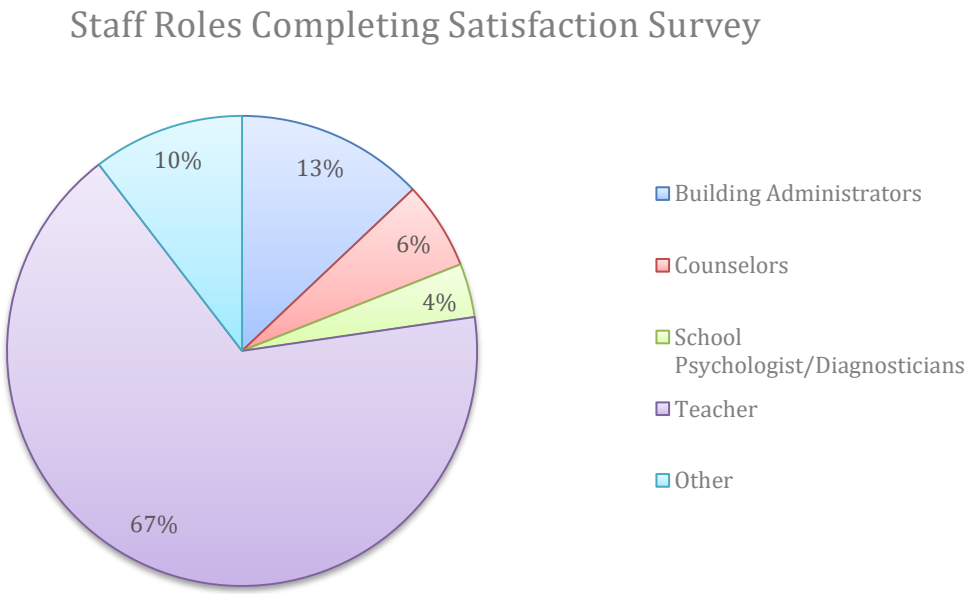
Table 6. Feedback from Best Practice Training- Student Attendees from July - December 2018

Items	Overall (n = 60)	
	Mean	**SD**
How familiar were you of the information today BEFORE the lesson was taught?	3.26	0.89
How familiar were you of the information today AFTER the lesson was taught?	4.13	0.67

Note: Higher scores are better. Range for scoring was 1 to 5.

Consumer Feedback

We continue to gather biannual feedback from our Coalition school administrators, school counselors, social workers, and school psychologists, and other school staff (e.g., superintendents, district administrators, home school communicators) in efforts to refine practices and inform our work. A total of **284** individuals replied to a brief survey at the end of the school year, providing feedback regarding: 1) Importance of our work; 2) Satisfaction of work; 3) Satisfaction of the collaboration/partnership; and 4) and school's use of the data. The following pie chart depicts the percentage of individuals in participating roles that completed the satisfaction survey:



The average ratings and standard deviations across consumer satisfaction items are provided below in Table 7.

Table 7. Consumer Satisfaction Survey Results July – December 2018

Questions:	Administrators (n =25)	Counselors (n = 18)	School Psychs (n = 11)	Teachers (n=199)	ALL (n = 284)
How important is the work the Coalition has been providing in your school(s)?	4.24 (0.72)	3.72 (0.46)	4.09 (0.54)	3.71 (0.84)	3.82 (0.64)
How important is the work you and the Coalition are doing together?	4.24 (0.72)	3.94 (0.42)	4.00 (0.63)	3.53 (0.83)	3.69 (0.85)
Overall, how satisfied have you been with the work of the Coalition in your school(s)?	4.25 (0.79)	3.72 (0.75)	4.09 (1.14)	3.38 (0.95)	3.58 (0.98)
How satisfied have you been with communication and collaboration among coalition staff and school staff?	4.08 (0.95)	4.06 (0.80)	4.27 (1.19)	3.22 (0.97)	3.48 (1.04)
How satisfied have you been with your partnership with the coalition?	4.25 (0.79)	3.89 (0.83)	4.18 (0.98)	3.37 (0.90)	3.58 (0.95)

Note: Higher scores are better. Range for scoring was 1 to 5.

In addition, consumers were asked about their involvement with checklist data and if appropriate for their position, if they shared the data with their teachers or staff.

- **165/283 or 58%** reported they were involved in the use of the checklist data.
- **117/52 or 41%** indicated they shared checklist information with teacher or staff.

General Feedback: The survey participants were also allotted the opportunity to provide feedback on what is going well and suggestions for improvement. The responses were overwhelmingly positive with regard to the checklist data and having regional coordinators available in schools to support problem solving team implementation. A common theme for suggestions or areas for improvement were voiced by teachers. Specifically comments from teachers expressed the desire to see checklist data more often than current. Many teachers indicated they had never seen the checklist. Anecdotal comments revealed common themes of barriers and solutions. Based on the responses, themes that emerged included: a). Teacher's Lack of Familiarity with Data Reports, b). Need for Clarity of Purpose and Role, and c). Collaboration through Problem Solving Teams

Barrier #1: Teacher's Lack of Familiarity with Data Reports

"I would like to see the results more often over our surveys. I would also like to see more school wide intervention for at risk students; strategies to help students, targeted material or curriculum."
--TEACHER ELEMENTARY

"I believe if we are having students take the checklist it is important to see the results of our students. I know that the high-risk students get placed in a small group outside of the classroom, but it would be highly beneficial to be able to recognize other students as well who may be struggling in an area. Classroom teachers could easily change/implement a thing or two to help meet those needs of other students not in the high-risk category."
--TEACHER ELEMENTARY

"I think the surveys are very important--however, I'm not sure what is being done with our high flyers. Our counselor has been in to discuss some of the students who were flagged, but I still would like to know what, if anything, the Mental Health Coalition is doing to help these kids be more successful and overcome their obstacles."
--TEACHER SECONDARY

"I have never met our coalition liaison. Our counselor and administrator make all decisions based on the surveys, to my knowledge. Teachers are not included on any decision-making with the surveys."
--TEACHER ELEMENTARY

"I don't hear a lot of communication with regards to how this data is being used to help students or student/staff relationships. For example: I fill out the data form on my students and don't see any results or ways this data is used."
--TEACHER ELEMENTARY

"I also wish our administration would do a better job of looking at the data and thinking of school wide interventions. I just think our administration is reluctant to take anything on."
- OUTREACH COUNSELLOR, SECONDARY SCHOOL

"While I have access to the data, the general faculty/staff do not. The principal does not share out this information on a regular basis. I am not sure what this is not done. I know the value of the information; I am not sure that the building principal sees the value of the information going out to staff"
--DISTRCT LEVEL ADMINISTRATOR

"My son is a current fourth grader and was red flagged on the survey. His teacher had no idea until I discussed it with her. It would be helpful for her to know where the concerns lie."
--TEACHER ELEMENTARY

"Please communicate with teachers what programs/services have been implemented as a result of the data collection and which of our students, if any, are participating."
--TEACHER, SECONDARY

"Let teachers know that the data is being used."
--TEACHER, SECONDARY

"More communication, especially with results and what the coalition is doing with students based on the results." --TEACHER, ELEMENTARY

"Help teachers understand why we are doing this work and what we can to do support students in need."
--TEACHER, SECONDARY

Barrier #2: Need for Clarity of Purpose and Role

"What data can and cannot be shared. Want to share everything if possible and discuss students openly. Is this in or can it be in a MOU?"
--ASSISTANT PRINCIPAL, SECONDARY

"What concrete services and assistance can you provide to help in the now?"
--ASSISTANT PRINCIPAL, SECONDARY

"What is exactly done with all this data? Are parents informed of the results or do parents even know teachers are answering these questions about their child? Do parents know students are answering these questions about themselves?"
--TEACHER, SECONDARY

"I think it would be helpful to hear individual, group, and building case studies of interventions and supports that have been put in place and how they've benefitted buildings at large."
--ASSISTANT PRINCIPAL, ELLEMENTARY

"Develop a program to inform parents of all you do in the schools. Let them know the funding source."
--ADMINISTRATOR, K-8

Strengths: Collaboration through Problem Solving Teams

"Have coalition members more regularly attend building staff meetings or grade-level data team meetings to review checklist and/or DBR data with teachers and to discuss and set-up specific supports on a more individual and on-going basis (in partnership with the school psych, counselor, or other relevant staff members)."
--EDUCATIONAL DIAGNOSTICIAN

"At my elementary building, we have worked with our coalition person to get our problem-solving team up and running and she has been so helpful."
--SCHOOL PSYCHOLOGIST

"The Coalition helped us set up a productive PST team and we visit data on students we are working with to have better personal and school relationships."
--EDUCATIONAL DIAGNOSTICIAN

"I feel like we have a great partnership with our regional coordinator. She's very knowledgeable and willing to collaborate. She has provided feedback to us as we use data to develop Tier 2 interventions. I love that she serves on our building's problem-solving team!"
--SCHOOL PSYCHOLOGIST

"Our liaison does a wonderful job with moving our problem-solving teams along and helping consider other ideas for student supports in the classroom."
--SCHOOL PSYCHOLOGIST

Other Praises

"As we've gotten farther into our partnership with the Coalition, we have had more buy-in from staff. The only real barriers we have met are from individual staff who are in denial of the need for mental health education and intervention in the schools, or staff whose personal organization systems need to be fixed in order to accommodate accumulating data on students. The support we have seen from our representative, coupled with her proactive nature has met these barriers with grace."

"Honestly, time. Finding the time in meetings to present the data - we've done it but that is just difficult with everything else we are doing. However, it HAS to be done!"

"I wish we had more time to do more interventions. They always prove to be great at addressing the kids' needs. I am always glad for their help - and they are always helpful, professional, and caring."

"Our partnership with the Boone County Mental Health Coalition has been extremely beneficial for our entire school community! Starting with the checklist data, we have been able to identify children needing individual and group counseling. Communicating these needs to parents and teachers is a wonderful place to start. Now in year four, we have continued to build on the information gathered and have found new ways to support all our kids and families. We have accessed a great number of services from outside help with counseling groups to grade level curriculum to address specific needs. Lou Ann is there to provide support for anything we need and is constantly stepping up to help us problem solve and find ways to meet the needs of our students and families. We can't even begin to express our gratitude for all the coalition does for OLLIS and look forward to continuing this relationship in the future!"
--Amy Kaiser, OLLIS

See appendix for an additional testimonial on the Benefits of the Coalition
--Ann Baker, Outreach Counselors

Quality Improvement & Solutions:

Many of the suggestions for improvement supplied by teachers indicate a desire to see the checklist data and use the checklist data more frequently. This information will be shared with our board and schools and discuss how to integrate the use of data within problem solving meetings and to highlight administrative decisions regarding to data and publicize how schools are taking action via faculty meetings, newsletters, etc. Furthermore, Columbia Public Schools has created a system to provide instantaneous access to student profiles that include checklist data, within the current system. Thus, we expect increased access within the context of other school data will increase the dissemination and sharing of data to key stakeholders.

We have begun to brainstorm methods for addressing key issues above. First and foremost, we will share this information with our board and gather their input. Secondly, we hope to communicate teacher feedback directly to administrators and derive solutions via administrators as they are often the decision makers in schools in how the data is used and disseminated. It is critical that we develop solutions that involve teacher input, benefit teachers, but protect the privacy of students and result in solutions that are rooted in best practices in sharing and using assessment data. **As such, solutions must involve sharing student data in a manner that supports teachers understand and interpret the information in a valid manner AND take appropriate action in response**. Some solutions discussed methods for sharing checklist data, ultimately, with parents, via teachers. Similar cautions must be used and considered with parents, we must develop innovative solutions for sharing sensitive student data with parents in a manner that can be understood and acted up on in a manner that supports and is in the best interest of all students. We are eager to explore solutions with our board members and key stakeholders.

Student Testimonials

In addition to gathering consumer satisfaction from staff and school personnel, we gathered feedback from students that were directly involved in group or individual therapy services. The following student feedback has been de-identified to protect privacy and confidentiality. Our students are our ultimate beneficiaries of services; therefore, we highly value the feedback and testimonials provided.

Student Testimonials from Group Therapy Participants

"The breathing exercises help me be a better listener."
--2nd grade, Strong Start intervention participant

"My favorite was reading the books. I especially like the book with the frog where the book was not being very nice to the frog. *(The Happiest Book Ever by Bob Shea)*
--2nd grade, Strong Start intervention participant

The breathing exercises help me at home when I am mad.
--2nd grade, Strong Start intervention participant

"I like the books and I never want to leave Mrs. Burbridge."
--2nd grade, Strong Start intervention participant

"I like having nice friends in the group"
--1st grade, Group therapy intervention participant

"The group helped me be a better friend."
--1st grade, Group therapy intervention participant

"I like coming here to talk about my feelings"
--3rd grade, Group Therapy participant

"It is fun to come here and be in the group together"
--3rd grade, Group Therapy participant

University of Missouri Partnership

There is a strong and fruitful partnership between the Coalition and University of Missouri. Graduate students from School Psychology, Social Work, Counseling Psychology, and Special Education are active participants in the Coalition. Twenty-one graduate students support the Motivational Interviewing with At-Risk Students (MARS) Mentoring program at a local alternative school, **providing over 500 direct service hours**.

In addition, three school psychology doctoral students worked in the schools on a weekly basis. These graduate students provided several hundred direct services hours to youth in schools based on the Coalition data, providing group based and individualized services for youth. Two of the three students are returning students with a strong background in our work and collaboration with schools. Beginning in August of 2018, we have had four advanced doctoral students in School Psychology at the University of Missouri, and one Master's in Counseling student from Central Methodist University join our team as practicum students. Each student will fulfill requirements of 10-20 hours or work per week in our schools.

In addition, we have two postdoctoral fellows who are funded to work with MU through a postdoctoral fellowship with the Institute of Education Sciences. Both work 20 hours per week in the Coalition schools (free to the Coalition). These activities are part of their training opportunity and both are earning their licensure hours while working in our schools. Drs. Smith and McCall bring a host of expertise in school-based consultation and working with children and families with challenging behaviors.

Resulting Products

- **Early Identification System:** We have developed the online teacher and student checklists for the early identification system. All reports are automated and available to schools at the time that all student data are finalized (e.g., when the last student or last teacher finishes the checklist).

- **Alternative School Risk Assessment:** We have developed an assessment system for high-risk youth in alternative school placements and tailored mentoring intervention.

- **Problem Solving Team Forms:** We have developed problem solving process forms that school-based teams utilize to document the problems solving process with students in their schools. These forms have been adapted by Columbia Public Schools to use these forms universally across all schools in their district.

- **Automation of Checklist Data:** We have developed automated excel files that allow school-based teams to review data and track interventions and assessments of students identified as having risk within the early identification system.

- **Manual:** We have finalized a manual that provides a menu of options for universal, selective, and indicated intervention across the risk domains to support schools in determining appropriate and feasible interventions. More details and the manual can be viewed below as they have been disseminated via a shared Google Drive developed and created in direct result of counselor and stakeholder feedback.

- **Best Practices Trainings:** We have developed professional development sessions on helping students with executive functioning, helping teachers with classroom behavior management, supporting schools in developing behavior support plans, working with students with severe behavior problems, and using Motivational Interviewing with families, youth, and school personnel. All available online at http://bcschoolsmh.org/for-schools/training-resources/

- **Dissemination:** We have developed dissemination brochures for parents and school personnel. These will be included within our manual and available on our website for support to school and parents

- **Website:** We developed and maintain the Boone County School Mental Health Coalition website: http://bcschoolsmh.org

- **Twitter:** The BCSMHC uses the social media platform, Twitter, to engage with the community and promote topics surrounding social and emotional health. @BCschoolsMH currently has 274 followers with a total of 3,269 "retweets" and 4,357 "likes". Between January 2018-December 201, 8the BCSMHC's Twitter had 47.1k impressions, which means that one or more of our tweets reached over 47,000 twitter users' feed. One tweet with the highest level of engagement from followers addressed the hot topic regarding the Netflix Show: 13 Reasons Why and highlighting the Center for Disease Control's report on increase in national suicide risk. The tweet sought to raise awareness and bring attention to common warning signs and support for risk. This tweet targeted parents and educators. The Coalition recognizes the utility in engaging consumers and county residents in informed messages and stigma reducing content and will continue to utilize twitter, and other social media sources, as a platform for advocacy for mental health support and prevention of long-term problems.

- **Universal Fidelity Measure:** We have developed a universal fidelity measure (U-FIT) that can be used to measure implementation of any skill-based intervention across all domains and levels (universal, selective, intensive). We began administration of this measure to supplemental evaluation of effectiveness and provide feedback to implementers or evidence-based curriculum.
    - See above for preliminary data results for our small group implementation

- **Cross Program Collaboration Training:** We collaborated with Dr. Kristen Hawley, Susan Perkins (CPS), and Betsy Jones (CPS) to develop a professional development for social services agencies. The title of the workshop is: "*Coordinating Youth Mental Health Care Effectively with the School System*". This 4-hour workshop provided youth mental healthcare participants with information and strategies to coordinate youth mental health care effectively with the school system. Participant feedback is summarized above.

- **Suicide Prevention and Intervention Protocol:** We have developed a model suicide prevention and intervention protocol for some participating districts to adopt into policy, at their request. This model provides guidelines for both preventative activities,

but also for completing a suicide risk assessment and appropriate actions as a result of the assessment.

- **Executive Functioning Curriculum:** We have been collaborating Columbia Public Schools Data and Intervention Services to develop a universal model curriculum for promoting executive functioning skills such as: organization, planning, time management, and other related skills that support academic success. The curriculum is intended to be delivered in middle schools for all students in the upcoming 2018-2019 academic year. The development of this model curriculum is a result of identified risk across districts and counties in the area of **Attention and Academic Competence** on the Teacher Checklist.

- **Fidelity to Model:** To better understand our schools' use of the model of prevention and intervention utilized and promoted through the Coalition's work, we have developed a fidelity measure to assess use of Teacher and Student Checklist data within each school. The regional coordinators complete this tool three times per year to reflect the use of data after checklist administrations. In addition to coordinator completion, the fidelity tool was also completed in collaboration with school teams (e.g., administrators, counselors, etc). The information collected will better allow us to identify barriers and goals within our collaboration for each school. This year, the results of the data were shared with superintendents to help address large scale barriers and share successes across our three-year collaboration thus far.

- **Shared Google Drive**: As a result of continued feedback from our stakeholders, Coalition staff has partnered with counselors to engage in collaborative monthly meetings to discuss best practices in using checklist data and sharing cross county and school ideas for use of data. As a result of continued discussions, county counselors developed the concept of a shared location for resources, interventions, and materials to mutually share across schools. As such, a shared Google Drive has been developed to include counselor identified resources that mutually benefit schools. This Google Drive includes:
    - Checklist supporting documents (e.g. Student Checklist Administration Script, FAQs for Checklist completion, etc)
    - The Coalition Manual and Intervention Menu of Options (attached)
    - Reference Guides for Parents and Stakeholders
    - Results of the Institute of Education Sciences (IES) Validity student (see below for overview of findings)

We are excited about the collocated resources and opportunity to continue our collaboration amongst schools. Counselors determined a mechanism for adding information to the Google Drive that ensures materials are vetted and appropriately shared. We are eager to see this resource grow!

- **Institute of Education Sciences (IES) Study Findings**: See the validity study report in the Appendix. The document was developed to disseminate and share the results of the IES partnership grant to evaluate the validity of the checklists.

Other Products

Funding

- We were **awarded funding** for a grant proposal to the Institute of Education Sciences (IES) entitled, *Creating a Comprehensive Data-based Coordinated System of Care for School Districts to Promote Youth Academic Success and Social Emotional Development: A Researcher-Practitioner Partnership* to fund a 2 year project and provide **$397,211** in support for development, implementation, and validation of all assessments associated with the early identification system. See the following link for full announcement: https://ies.ed.gov/funding/grantsearch/details.asp?ID=1981

- Dr. Holmes recently received an Early Career Research Award from the *Society for the Study of School Psychology* (SSSP) to develop and test a system to provide teachers and school counselors with feedback on their selection and implementation of evidence-based interventions. Part of the project will focus on validating the U-FIT measure that Drs. Owens, Holmes, and Reinke developed for the coalition to assess the fidelity with which interventions are being implemented. This research will help develop a tool that can be integrated into the coalition's practice and used by schools to ensure that they are maximizing the effects of the interventions they are implementing.

Manuscripts & Publications

The following manuscripts were accepted in peer-reviewed journals in efforts to disseminate the Coalition model:

- Huang, F. L., Reinke, W. M., Thompson, A., Herman, K. C. & the County Schools Mental Health Coalition, (2018). An investigation of the psychometric properties of the early identification system-student report. Journal of Psychoeducational Assessment. doi: https://doi.org/10.1177/0734282918758791
- Reinke, W.M., Thompson, A. Herman, K.C., Holmes, S., Owens, S., Cohen, D. Tanner-Jones, L., Henry, L., Green, A., Copeland, C., & County Schools Mental Health Coalition (2018). The County Schools Mental Health Coalition: A model for community level impact. *School Mental Health*, *10,* 173-180.
- Thompson, A. M., Reinke, W. M., Holmes, S., Danforth, L., Herman, K. C., & the County School Mental Health Coalition. (2017). The County School Mental Health Coalition: A model for a systematic approach to supporting youth. *Children & Schools*, 209-218.

Presentations

We have presented the Coalition model at national and international conferences to support dissemination of the model. The following are presentations that have been presented, accepted or submitted for future presentation in the current funding cycle:

- Brown, J., Clark, C., Jones, G., Lenger, S., Parker, T., Schimidt, J., Shinn, K. (2018, March). Engaging and empowering students, staff, and communities: Working together to improve academically emotionally and socially. Professional collaboration presented at Missouri Association of Elementary School Principals (MAESP) Annual Conference, Osage Beach, MO.
- Owens, S. A., Williams, R., & Jones, B. (2017, March). *A Prevention Based Model of Systemic Mental Health Care and Collaboration with Schools*. Professional collaboration presented at Collaborative Conference on Evidence-Based Practices, Osage Beach, MO.
- Holmes, S. R., Owens, S., & Reinke, W. M. (2018, February). Maximizing measurement: A universal and multidimensional approach to fidelity. Paper to be presented at the annual conference of the National Association of School Psychologists, Chicago, IL.
- Holmes, S.R., Owens, S., & Reinke, W. M. (2018, March). *The universal fidelity tool*: An efficient and practical approach to assessing fidelity. Paper to be presented at the 15th International Conference on Positive Behavior Support, San Diego, CA.

- Cohen, D. R., Reinke, W. M., Thompson, A., Herman, K. C., Owens, S., & Tanner-Jones, L. A. (2018, August). *School mental health service utilization in a county-wide program*. Poster to be presented at the American Psychological Association Annual Convention, San Francisco, CA.
- Thompson, A., Tanner-Jones, L., & Oetker, L.(October, 2018).Data Driven Social, Emotional, and Behavioral Support: The Boone County Schools Mental Health Coalition's Model of Assessment and Prevention Presentation presented at the Annual Midwest School Social Work Conference, St Louis, MO.
- Owens, S. A., Holmes, S., & Copeland, C. (2019, February). Implementation outcomes of a public health prevention and intervention model. Paper to be presented at the National Association of School Psychologist (NASP) Annual Convention in Atlanta, GA.
- Hodgson, C., Owens, S., & Reinke, W. (2019, February). Behavior screening in the wild: Leveraging data to optimize outcomes. Paper to be presented at National Association of School Psychologists Annual Convention, Atlanta, GA.
- Holmes, S. & Owens, S. A. (2019, February). Making it fit with UFIT: Implementing interventions with fidelity. Paper to be presented at the National Association of School Psychologist (NASP) Annual Convention in Atlanta, GA.
- Strawhun, J., Cho, E., Hawley, K., Owens, S., Reinke, W., & Smith, T. (2019, August). The FIRST intervention: A school-based randomized controlled trial for internalizing concerns. Poster accepted to the annual convention of the American Psychological Association, Chicago, IL.

Appendix

RE: The Benefits of Boone County Mental Health Coalition to Columbia Public Schools
August 15, 2018

I would like to give a testimonial regarding the benefits I've experienced in working with the Boone County Schools Mental Health Coalition. I have been an Outreach Counselor with CPS since 1998. Prior to that, I worked as a contracted therapist with the schools for a few years. Working with the Coalition has been a dream for me. There are so many ways they've benefitted my students and families, it's hard to find a place to start. I'll start with and discuss my experiences from the last year.

For the 2017-2018 school year, I was new to Jeff Middle School. Part of my duties in this building was to facilitate their Student Assistance Team. It seemed in talking with others at the start of the year there was no formal framework to process their students. I asked Lindsay Oettker, who was also the liaison for Smithton Middle School (where I was previously), if she would help us put together a framework for a new Problem Solving Team. For the bulk of the year, we developed our process with Lindsay and processed several students simultaneously. In that time frame, we developed Daily Behavioral Rating scales to send to teachers so that we could document behaviors. This process was all done using our data – and allowed us to share out with teachers which of our interventions were showing success. During this time, we were able to get staff buy-in for the process and they started working with us. It has been tremendously rewarding to see our students feel some success, our teachers see our students placed in appropriate classes, and to feel like we can effect some change for good.

Over the summer, we worked on a training for our staff to clarify the process. We developed some forms and a referral process that is teacher-friendly. We've asked for feedback and will be improving our process. Lindsay has been central to this process. I've complimented Lindsay many times on her role with us. She is very careful not to tell us what to do – but always offers us assistance in achieving our goals. Lindsay is always optimistic, a great critical thinker, and offers encouragement at every turn. She has been most skilled in directing our discussions so that we can be productive. She asks the questions that drive our work. I feel she has been the driving force that has allowed us to "find our feet" in creating this process and feeling confident in using it ourselves.

In addition to help with PST, Lindsay helps with the checklist. She helps us look at the data and interpret the information to make decisions about how to intervene or shore up supports for our students. Lindsay co-facilitated many groups with us last year to address our students whose data indicated that they internalized their feelings. She offered curriculum suggestions, and graciously gave us her time to help organize and facilitate. The students offered very positive feedback about the groups in their exit surveys.

Over the course of the years, as an Outreach Counselor, I have also relied heavily on Interagency Treatment Team meetings. Dr. Tanner-Jones has facilitated this meeting at different times over the years – formerly as a CPS employee. This meeting is always conducted with a great deal of compassion in Lou Ann's most capable hands. She provides a non-judgmental environment, and frames the efforts of the meeting to be about support for families who struggle. Many families

have benefitted from these meetings, and leave feeling like they are not alone in their struggles, and come away with the knowledge of how to access other supports in the community. This service is invaluable.

Finally, the Coalition offered us a comprehensive supportive service a couple of years ago when we had an unusual situation. When the program "13 Reasons Why" premiered, the student body of Smithton had an unusual spike in expressed suicidal ideation and attempts. Several were serious enough to require medical and/or psychiatric hospitalizations. This had an impact not only on our students, but also on our staff. The Coalition offered to provide support for teachers. They offered data driven research to explain what we were seeing at our school. We discussed resources for additional reading for teachers, and we acknowledged how this emotional burden takes a toll on everyone. In addition, we emphasized the Employee Assistance Program if our staff felt they needed to work with a counselor. The teachers were very appreciative of the efforts that were made. The Coalition was amazing in quickly pulling together resources to support our staff. Again, they asked what would be helpful, and offered their expertise and information. They are always respectful of what is being asked for, versus what they think should be done.

I really appreciate the opportunity to talk about my experiences with the Coalition. With the rise in mental health needs in our students (and across the nation), it is easy to feel overwhelmed as an Outreach Counselor. We often feel like the needs far surpass our time and resources. The Coalition has made access so much easier, and the help offered so much more targeted. This type of support has been the relief that has been needed for some time. I hope we can continue in this partnership for the foreseeable future.

Respectfully,

Ann Baker

Ann Baker, LCSW
Outreach Counselor

Validity Study of the Coalition Teacher and Student Checklist

What was done to determine if the measures are valid—that they are useful and meaningful?

1. A group of teachers who agreed to complete another widely used similar measure that is already known to be valid, the Behavioral and Emotional Screening System (BESS-see https://www.pearsonclinical.com/education/products/100001482/basc3-behavioral-and-emotional-screening-system--basc-3-bess.html) at the same time they completed the Coalition Teacher checklist on students in their classroom.

- **Why?** By gathering data from teachers on both the Coalition measure and a widely used and knowingly valid measure we can determine if the data are similar (or not). If they are similar it means that the Coalition measure is also valid.

2. We conducted regression analyses to compare results of the Coalition checklist with the widely used and valid measure. For each analysis we included student race, gender, and lunch status because these demographics are highly related to student emotional and academic risk. By including this information in analyses, any relationship between the Coalition checklist results and the BESS is above and beyond the impact of demographic characteristics on the BESS results.

- We separately examined both the teacher- and student-report Checklist at each school level (elementary: 3-5, middle: 6-8, and high: 9-12), resulting in 6 total groups of analyses.
- **Why?** Regression analyses let us know how well one thing is related with another. We wanted to know how similar or different Checklist results were from the widely used measure. By including the demographics of students, we can see how much of the association is truly due to the Coalition data independent of other important considerations. Also, we wanted to see if the findings were similar or different across elementary, middle school, and high school age students.

3. We used end of year data about the number of office discipline referrals (ODRs), in-school suspensions (ISS), out of school suspension (OSS), attendance, and MAP scores to determine if data from the Coalition checklists were associated with or could predict these end of year data.

- **Why?** If beginning of the year Coalition checklist data can predict whether a student receives ODRs, ISS, OSS, has poor attendance, or poor MAP performance, then the measure is useful in determining who we might want to give supports to help prevent these disciplinary, attendance, and or academic performance problems.

What did the study find?

1. The findings were **overwhelmingly supportive** of the Coalition teacher and student checklists being valid due to its similarity to the **widely-used and valid measure (BESS).** We break the findings into elementary, middle school, and high school results.

Teacher Checklist Results

- **Elementary School:**
    - The total score (sum of all items) of the Coalition teacher checklist was highly associated with the BESS, meaning that the total score on the Coalition teacher checklist was similar to the BESS and therefore a valid measure.
    - Because we use individual problem areas (e.g., peer relations) to determine which students may benefit from supports, so we need to determine if they are valid too: All of these scores; a) peer relations and social skills, b) externalizing problems, c) internalizing problems, and d) attention and academic competence were also associated with the BESS, meaning that they each are valid on their own.
- **Middle School:** We conducted the same analyses and found the same findings. The total score (sum of all items) of the Coalition teacher checklist was highly associated with the BESS, and **all**

of the subdomains were significantly associated. Thus, the teacher checklist is also valid with middle school students.

- **High School:** We conducted the same analyses and found the same findings. The total score (sum of all items) of the Coalition teacher checklist was highly associated with the BESS, and **all** of the subdomains were significantly associated. Thus, the teacher checklist is also valid with high school students.

Student Checklist Results

- **Elementary School**: The total score (sum of all items) of the Coalition student checklist (3-5th grade) was associated with the BESS, meaning that the total score on the Coalition student checklist was similar to the BESS and therefore a valid measure. Further, the individual problem areas (e.g., peer relations) used to determine which students may benefit from supports, were also associated with the BESS, meaning that they each are valid on their own.
    - For the Student Checklist, these areas include: a) peer relations and social skills, b) externalizing problems, c) internalizing problems, and d) attention and academic competence, e) emotion regulation, f) bully behavior, and g) school engagement.
- **Middle School:** We conducted the same analyses and found the same findings. The total score (sum of all items) of the Coalition student checklist was associated with the BESS, and all of the subdomains were significantly associated. Thus, the student checklist is also valid with middle school students.
- **High School**: We conducted the same analyses and found the same findings. The total score (sum of all items) of the Coalition student checklist was associated with the BESS, and all of the subdomains were significantly associated. Thus, the student checklist is also valid with high school students.

- **Nuanced findings:** a) The student checklist was not as strongly associated with the BESS as the teacher checklist. However, this was expected because the BESS is completed by the teacher (not student) and therefore, should be more weakly associated. b) The bully behavior and school engagement subdomain scores, although associated with the overall BESS, were less than the other subdomains. This is because the BESS does not assess for bully behavior or school engagement but is a more broad assessment of social and emotional behavior.

2. The findings were **overwhelmingly supportive** of the Coalition teacher and student checklists being a valid **predictor** of student end of year **ODRs, ISS, OSS, attendance, and MAP scores**. We break the findings into elementary, middle school, and high school results.

Teacher Checklist Results

- **Elementary School**: The overall score on the teacher checklist was positively associated with ODRs, ISS, and OSS, meaning that higher scores on the Coalition teacher checklist in the fall (cycle 1) were associated with more ODRs, ISS, and OSS **by end of year**. The overall score was negatively associated with attendance and MAP communication and math scores, meaning that higher scores on the Coalition teacher checklist in the fall were associated with lower attendance and MAP scores. Thus, the overall score in the fall is predictive of negative outcomes at the end of the year.
    - **Subdomains**: All teacher checklist subdomains were associated in the same manner as the overall score. The internalizing problems subdomain was associated with later year outcomes but not as strongly as other subdomains. This is expected because internalizing problems are not as related to the end of year outcomes as other subdomains (e.g., externalizing behavior problems).

- **Middle School:** We conducted the same analyses and found the same findings. The total score (sum of all items) and subdomains of the Coalition teacher checklist was positively associated with ODRs, ISS, OSS, and negatively associated with attendance and MAP scores. Thus, the teacher checklist data in the fall is predictive of negative outcomes at the end of the year for middle school students.
- **High School:** We conducted the same analyses and found the same findings. The total score (sum of all items) and subdomains of the Coalition teacher checklist was positively associated with ODRs, ISS, OSS, and negatively associated with attendance. MAP scores were not available for high school students. Thus, the teacher checklist data in the fall is predictive of negative outcomes at the end of the year for high school students.

Student Checklist Results

- **Elementary School**: The overall score on the student checklist was positively associated with ODRs, ISS, and OSS, meaning that higher scores on the Coalition student checklist in the fall (cycle 1) were associated with more ODRs, ISS, and OSS **by end of year**. The overall score was negatively associated with attendance and MAP communication and math scores, meaning that higher scores on the Coalition student checklist in the fall were associated with lower attendance and MAP scores. Thus, the overall score in the fall is predictive of negative outcomes at the end of the year.
    - **Subdomains**: The student checklist subdomains of a) peer relations and social skills, b) externalizing problems, c) attention and academic competence, d) emotion regulation, were associated in the same manner as the overall score, meaning that student ratings in the fall are predictive of end of year outcomes. Internalizing problems did not predict OSS. Internalizing problems are not typically related to OSS so this was not unexpected. School engagement scores were not predictive of MAP scores. Student report of school

engagement was expected to predict MAP scores, but it could be that a large number of students tend to score high on this subdomain (less engaged) and therefore it is hard to differentiate lower achievers on this subdomain.

- **Middle School:** We conducted the same analyses and found the same findings. The total score (sum of all items) and most subdomains the of the Coalition student checklist was positively associated with ODRs, ISS, OSS, and negatively associated with attendance and MAP scores. Internalizing problems only predicted attendance, which was expected. School engagement was not predictive of MAP scores or OSS and similarly Bully behavior was not associated with MAP scores. Overall though, the student checklist data in the fall is predictive of negative outcomes at the end of the year for middle school students.
- **High School:** We conducted the same analyses and found the same findings. The total score (sum of all items) and most subdomains of the Coalition student checklist were was positively associated with ODRs, ISS, OSS, and negatively associated with attendance. MAP scores were not available for high school students. Internalizing problems only predicted attendance, which was expected. School engagement did not predict OSS. Overall though, the student checklist data in the fall is predictive of negative outcomes at the end of the year for high school students.

Summary: Results of the Coalition Checklist, both teacher and student report, are associated with an established socioemotional screener at all grade levels. Further, these results predict negative student outcomes and can be used to identify students appropriate for preventive and early intervention services.

Table 1. Predictive Validity of EIS Student Report Controlling for Gender, Lunch Status, and Race. Higher EIS scores indicate greater risk.

Elementary School EIS Domains	%Att ($n = 4455$)	#ODRs ($n = 4631$)	#OSS ($n = 4631$)	#ISS ($n = 4631$)	MAP-Comm ($n = 2709$)	MAP-Math ($n = 2724$)	BESS t-score ($n = 667$)
EIS-Total Risk	**-.09***	**.20***	**.12***	**.14***	**-.14***	**-.24***	**.38***
EIS- Peer Relations	**-.09***	**.20***	**.12***	**.14***	**-.14***	**-.14***	**.38***
EIS-Ext	**-.06***	**.28***	**.19***	**.18***	**-.15***	**-.15***	**.32***
EIS-Int	**-.04***	**.07***	-.02	**.05***	**-.10***	**-.10***	**.25***
EIS-Att/Acad	**-.07***	**.15***	**.09***	**.11***	**-.18***	**-19***	**.33***
EIS-EmoReg	**-.08***	**.18***	**.09***	**.11***	**-.10***	**-.11***	**.33***
EIS-Bully	**-.04***	**.14***	**.09***	**.12***	**-.06***	**-.06***	**.14***
EIS-Engage	**-07***	**.10***	**.07***	**.08***	.000	-.01	**.15***

Middle School EIS Domains	%Att ($n = 4332$)	#ODRs ($n = 4493$)	#OSS ($n = 4485$)	#ISS ($n = 4485$)	MAP-Comm ($n = 3843$)	MAP-Math ($n = 3794$)	BESS t-score ($n = 701$)
EIS-Total Risk	**-.15***	**.19***	**.12***	**.14***	**-.08***	**-.10***	**.33***
EIS-Peer Relations	**-.15***	**.19***	**.12***	**.14***	**-.08***	**-.10***	**.33***
EIS-Ext	**-.15***	**.36***	**.23***	**.28***	**-.13***	**-.13***	**.34***
EIS-Int	**-.10***	.03	-.03	-.02	-.01	-.03	**.14***
EIS-Att/Acad	**-.15***	**.14***	**.09***	**.10***	**-.11***	**-.13***	**.34***
EIS-EmoReg	**-.11***	**.16***	**.12***	**.14***	**-.10***	**-.11***	**.27***
EIS-Bully	**-.06***	**.17***	**.14***	**.16***	.001	-.01	**.12***
EIS-Engage	**-.09***	**.06***	.001	**.03***	-.003	-.02	**.18***

High School EIS Domains	%Att ($n = 4455$)	#ODRs ($n = 4640$)	#OSS ($n = 4640$)	#ISS ($n = 4640$)	(no MAP data available)	(no MAP data available)	BESS t-score ($n = 565$)
EIS-Total Risk	**-.14***	**.12***	**.05***	**.09***			**.24***
EIS-Peer Relations	**-.14***	**.12***	**.05***	**.09***			**.24***
EIS-Ext	**-.14***	**.26***	**.15***	**.21***			**.24***
EIS-Int	**-.08***	.01	-02	.02			**.12***
EIS-Att/Acad	**-.18***	**.13***	**.04***	**.11***			**.27***
EIS-EmoReg	**-.08***	**.13***	**.09***	**.09***			**.24***
EIS-Bully	**-.04***	**.08***	**.03***	**.06***			.08
EIS-Engage	**-.11***	**.06***	.01	**.03***			**.11***

Note. ***statistically significant;*** %Att=percent attendance; #ODRs=total number of officer referrals; #OSS=total number of out of school suspensions; #ISS=total number of in school suspensions; MAP-Comm= Missouri Assessment Program-Communication Score; MAP-Math= Missouri Assessment Program-Math Score.

Table 2. Predictive Validity of EIS Teacher Report Controlling for Gender, Lunch Status, and Race. Higher EIS scores indicate greater risk.

Elementary EIS-Teacher	%Att ($n = 9214$)	#ODRs ($n = 9660$)	#OSS ($n = 9660$)	#ISS ($n = 9660$)	MAP-Comm ($n = 2796$)	MAP-Math ($n = 2821$)	BESS t-score ($n = 1674$)
EIS-Total Risk	**-.11***	**.40***	**.31***	**.29***	**-.23***	**-.24***	**.63***
EIS- Peer Relations	**-.09***	**.31***	**.23***	**.22***	**-.16***	**-.17***	**.43***
EIS-Ext	**-.07***	**.42***	**.32***	**.32***	**-.12***	**-.12***	**.47***
EIS-Int	**-.09***	**.10***	**.09***	**.05***	**-.07***	**-.10***	**.23***
EIS-Att/Acad	**-.09***	**.19***	**.14***	**.14***	**-.33***	**-.34***	**.62***

Middle School EIS-Teacher	%Att ($n = 4551$)	#ODRs ($n = 4753$)	#OSS ($n = 4753$	#ISS ($n = 4753$)	MAP-Comm ($n = 4020$)	MAP-Math ($n = 3984$)	BESS t-score ($n = 730$)
EIS-Total Risk	**-.17***	**.47***	**.31***	**.41***	**-.27***	**-.26***	**.57***
EIS-Peer Relations	**-.13***	**.32***	**.23***	**.28***	**-.20***	**-.18***	**.39***
EIS-Ext	**-.14***	**.51***	**.32***	**.46***	**-.19***	**-.17***	**.44***
EIS-Int	**-.11***	**.09***	**.09***	**.08***	**-.16***	**-.17***	**.22***
EIS-Att/Acad	**-.16***	**.14***	**.17***	**.32***	**-.33***	**-.33***	**.63***

High School EIS-Teacher	%Att ($n = 5538$)	#ODRs ($n = 5932$)	#OSS ($n = 5932$)	#ISS ($n = 5932$)	(no MAP data available)	(no MAP data available)	BESS t-score ($n = 681$)
EIS-Total Risk	**-.23***	**.46***	**.37***	**.41***			**.60***
EIS-Peer Relations	**-.13***	**.27***	**.25***	**.26***			**.42***
EIS-Ext	**-.18***	**.48***	**.42***	**.44***			**.45***
EIS-Int	**-.15***	**.11***	**.11***	**.11***			**.29***
EIS-Att/Acad	**-.26***	**.40***	**.23***	**.32***			**.63***

Note. ***statistically significant**; %Att=percent attendance; #ODRs=total number of officer referrals; #OSS=total number of out of school suspensions; #ISS=total number of in school suspensions; MAP-Comm= Missouri Assessment Program-Communication Score; MAP-Math= Missouri Assessment Program-Math Score.