An Examination of Systematic Screenings in a Rural Elementary School: Initial Lessons Learned

By

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ABSTRACT

In this study, Student Risk Screening Scale – Internalizing Externalizing (SRSS-IE; Lane, Oakes, Harris, et al., 2012) scores were examined to assess changes in student behavioral performance over time. A rural elementary school in a Midwestern state administered the SRSS-IE during the winter 2012 and spring 2013 within the context of a multi-tiered prevention model. This study investigated the initial overall levels of student risk, shifts in student risk, and the magnitude of relation between the SRSS-IE and its subscale scores to office discipline referrals (ODRs) earned throughout the school year. Results revealed the SRSS-IE scores were highly stable over time and relations found between the SRSS-I5 subscale scores and ODRs ($r = 0.06, -0.00$) were not statistically significant. Limitations, future directions, and implications for the findings related to these research objectives are discussed.
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>2</td>
</tr>
<tr>
<td>II. LITERATURE REVIEW</td>
<td>9</td>
</tr>
<tr>
<td>III. METHOD</td>
<td>36</td>
</tr>
<tr>
<td>IV. RESULTS</td>
<td>45</td>
</tr>
<tr>
<td>V. DISCUSSION</td>
<td>50</td>
</tr>
<tr>
<td>References</td>
<td>62</td>
</tr>
<tr>
<td>Appendix</td>
<td>82</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

As diversity in classrooms continues to increase (e.g., Artiles, Trent, Hoffman-Kipp, & López-Torres, 2000; Cochran-Smith & Dudley-Marling, 2012) from factors such as academic differences, behavioral patterns, language barriers, and socioeconomic statuses, teachers have to revamp their tool boxes to meet the unique needs of all their students. Fortunately, the educational community continuously evolves and researches to help teachers better facilitate instruction and create a classroom that embraces the rich diversity of students. Despite the well-determined efforts of educators who create positive, safe, and structured classroom environments, some students remain academically, behaviorally, and/or socially non-responsive to a whole school instructional program. In the past, students who demonstrated academic, behavior, or social deficiencies according to performance on set standards were subject to the “wait-to-fail” model. That is, students had to fail in one or more of these domains before receiving an intervention.

Thankfully, school systems today are shifting toward the proactive search and serve model reflected in the Individuals with Disabilities Education Improvement Act (IDEA, 2004) to support students before problems occur. Specifically, districts are adopting and establishing multi-tiered prevention models such as Positive Behavior Interventions and Supports (PBIS; Sugai & Horner, 2002), Response-to-Intervention (RtI; D. Fuchs & Fuchs, 2006), or Comprehensive, Integrated, Three-Tiered Models of Prevention (CI3T; Lane, Oakes, & Menzies, 2010). These frameworks encompass systematic approaches to preventing academic, behavioral, and social deficits, while also
providing appropriate interventions and supports for students demonstrating an existing need.

Each model of prevention contains primary, secondary, and tertiary level components constituting a continuum of interventions that increase in intensity (descriptions to follow). Interventions generally consist of more direct instruction, increased opportunities for the student to respond and practice, scaffolding, and additional self-motivating strategies (Basham, Israel, Graden, Poth, & Winston, 2010). Specifically, “intensity has been defined by the specialized nature of interventions, or strategies, the specialized nature of training to provide the intervention, or amount of time needed to show progress” (Basham et al., 2010, p. 250). The tiers within each model are designed to meet the needs of all students, including students with and without disabilities, students who are English learners (ELs), and students who would benefit from enrichment. To guide school-wide teams in determining which students are non-responsive at a primary, whole-school level, they can analyze student data such as office discipline referrals (ODRs), grade point average (GPA; except at the elementary level), attendance, and curriculum-based measurements in conjunction with systematic academic and behavioral screening tools to make the most informed decision (see Chapter II’s section on universal screeners).

Some researchers argue RtI, PBIS, and CI3T are proactive approaches to provide all students a high quality education and reach, at a minimum, proficiency on state standards as indicated by the No Child Left Behind Act of 2001. Also, each model offers access to a free and appropriate public education for students with disabilities mandated in IDEA (2004) by systematically screening all students to identify who requires additional supports using evidence-based interventions (Lane, Oakes, et al.,
Today there is extensive application of these three-tiered models of prevention at the elementary level and to a less degree at the middle and high school levels (Lane, Robertson, & Graham-Bailey, 2006). While these models are constructed to meet the needs of all students, RtI, PBIS, and CI3T are especially beneficial in meeting the multiple needs of students with and at risk for emotional or behavioral disorders (EBD; Kalberg, Lane, Driscoll, & Wehby, 2010; Lane, 2007).

Students with EBD possess various academic, behavioral, and social characteristics that can inhibit successful outcomes within and outside of a school setting. Children and youth with EBD are most often recognized for their externalizing behavior patterns manifested through acts such as verbal and physical aggression, coercive tactics, and delinquent acts that clearly capture teachers attention as these behaviors disrupt the classroom environment and impede instruction (Achenbach, 1991; Bradshaw, Buckley, & Ialongo, 2008; Lane, 2007). In contrast to these overt behaviors, students with EBD also exhibit internalizing behaviors. These overcontrolled behaviors include social withdrawal, anxiety, depression, somatic complaints, and eating disorders, all of which are no less harmful yet are less often recognized by teachers (Crick, Grotputer, & Bigbee, 2002; Morris, Shah, & Morris, 2002). In addition to these defining behaviors, students with EBD are at elevated risk for poor outcomes within and beyond the school environment. In brief, recent national studies have indicated that adolescents with EBD have an average GPA of 1.4, are absent 18 days a year, and 55% drop out (e.g., Bradley, Doolittle, & Bartolotta, 2008), a rate almost twice that for all students with disabilities (Wagner, D’Amico, Marder, Newman, & Blackorby, 1992).

Due to the intensity of the academic and behavioral challenges that students with or at risk for EBD possess, it is pertinent that systems of support and prevention are in
place within academic settings to address the complexity of needs. The multiple domains of academic, behavioral, and social skill concerns for children with EBD do not occur in isolation from each other (Lane, Menzies, Oakes, & Kalberg, 2012) so it is central to improving the bleak outcomes for these children and youth to address their multiple complex needs together within a tiered model of prevention as part of regular school practices. School districts across the nation are adopting systematics screening tools (e.g., Student Risk Screening Scale [SRSS], Drummond, 1994) to use within tiered prevention models to establish greater opportunities for children at risk to be more accurately identified and receive appropriate interventions at an earlier juncture in their educational career, reducing the likelihood that academic, behavioral, and/or social skill deficits worsen or remain stagnant over time (Bullis & Walker, 1994). These system-wide levels or prevention demonstrate promise for reducing antisocial behavioral patterns in youth who do not respond to universal approaches (Reinke et al., 2014; Woodbridge et al., 2014). Thus, preventative, comprehensive models of support incorporating accurate detection of students through systematic behavior screening tools are pivotal to address the emotional and behavioral needs of all children and youth.

**Statement of Problem**

Today’s educational systems are shifting toward the application of models of prevention (RtI, PBIS, and CI3T) as a push to “search and serve,” yet there is limited information on how to implement a systematic, data-based approach to more accurately identify children in need of further support and intervention. As schools adopt models of prevention, it is wise to couple data from systematic behavioral and academic screening tools to examine student performance over time for more accurate and earlier identification of children who need additional intervention efforts and supports. Teachers
have an extensive knowledge base related to the evaluation of academic performance over time. In addition, teachers have the needed information regarding behavioral and social skills performance to also support behavior screening efforts. However, behavior screening tools are not implemented to the same extent as academic screening tools (e.g., AIMSweb; Pearson Education, 2008). Both types of data are needed to further drive the instructional decision-making process as behavior and academic learning are interrelated (Lane & Wehby, 2002). Many schools rely solely on teacher nominations through ODRs to identify students at-risk for EBD creating a two-fold concern. First, the reliability of this approach may be problematic due to its subjectivity and consistency in which ODRs are reported unless a systematic approach is used to collect these data (e.g., School-wide Information System [SWIS], May et al., 2000). For example, a behavior that warrants an ODR in one classroom may not in another. Furthermore, ODRs do not adequately detect students with internalizing behavior patterns (McIntosh, Campbell, Russell, & Zumbo, 2009). Despite teachers’ best intentions to support students, children with “softer” signs of behavioral symptomology are frequently overlooked since teachers tend to refer students with problematic, externalizing behavioral patterns (Dowdy, Doane, Eklund, & Dever, 2011). The covert nature of internalizing behaviors are less recognized by classroom teachers since they rarely interfere with instruction. The unintentional overlooking of internalizing behavioral patterns children possess such as depression, social-withdrawal, obsessive-compulsive behaviors, and selective mutism (Gresham & Kern, 2004; Morris et al., 2002) during elementary years as childhood disorders predicts negative academic and post school outcomes (Masten et al., 2005). Integrating systematic behavioral screening tools into multi-tiered models of prevention as part of
regular school practices provides a structured approach to improved detection accuracy and earlier identification (Dowdy et al., 2011).

Some validated systematic screeners dual screen for internalizing and externalizing behavior patterns, such as the Systematic Screener for Behavior Disorders (SSBD; Walker & Severson, 1992), Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997), and Behavior Assessment System for Children, Second Edition, Behavioral and Emotional Screening System (BASC-2 BESS; Kamphaus & Reynolds, 2007). Given that consideration, the SRSS and its recently adapted counterpart, Student Risk Screening Scale – Internalizing and Externalizing (SRSS-IE; Lane, Oakes, Harris, et al., 2012) are convenient and free-access screening tools that can be integrated into regular school practices. Whereas the SRSS is designed to detect antisocial behavior patterns, the extended tool the SRSS-IE is constructed to identify students at risk for internalizing and externalizing behavior patterns. However, the SRSS-IE is in need of further research to support its reliability, validity, and feasibility to dual screen at the elementary level in an attempt to more comprehensively address students’ behavioral and social challenges during a time when they are most amenable to intervention efforts (Bullis & Walker, 1994).

Purpose

This study examined an elementary school’s administration of the SRSS-IE within a multi-tiered system of support during its first year of program implementation to provide an illustration of the SRSS-IE’s utility to identify students with externalizing and internalizing behavioral patterns. Specifically, the current study asked: (a) Based on the initial completion of the SRSS-IE during winter 2012, what were the overall levels of risk evident within the elementary school according to SRSS-E7, SRSS-I5, and SRSS-IE12
scores? (b) To what extent did the initial levels of risk shift from the winter to spring according to SRSS-E7, SRSS-I5, and SRSS-IE12 scores? (c) What is the nature of the relation between the SRSS-IE12 and its subscales (SRSS-I5 and SRSS-E7) and office discipline referrals earned over the course of an academic year?
CHAPTER II

REVIEW OF LITERATURE

Across the PK-12 continuum, students at risk for emotional and behavioral disorders (EBD; Lane, 2007) are too often overlooked or identified at a much later point in their educational careers due to subjective means of identification being utilized in schools nationwide. This is concerning as students with or at risk for EBD possess a range of internalizing, externalizing, or co-morbid characteristics affecting them throughout their lifetime (e.g., Landrum, Tankersley, & Kauffman, 2003; Wagner, Cameto, & Newman, 2003). This study explores initial overall levels of risk, shift in risk, and the relation between the Student Risk Screening Scale – Internalizing and Externalizing (SRSS-IE; Lane, Oakes, Harris, et al., 2012) and its subscales (SRSS-I5 and SRSS-E7) and office discipline referrals (ODRs) earned over the course of an academic year within an elementary school. Findings from this study provide insight on how this measure can be utilized as part of a tiered system of support to detect elementary-age students with internalizing and externalizing behavioral patterns at the earliest possible juncture to receive the support they need.

Students with Emotional and Behavioral Disorders

Students with EBD are defined by their wide variety of academic, behavioral, and social needs. It is estimated that 20% of school-aged students have at least mild forms of EBD (Forness, Freeman, Paparella, Kauffman, & Walker, 2012) but less than 1% of school-aged students across the PK-12 continuum receive special education services under the label of emotional disturbance (ED) as defined in the Individuals with Disabilities Education Act (IDEA; 2004). With such a small percentage of students with EBD receiving special education services under ED, it is critical for general education teachers to have the knowledge and skills to meet the challenging needs of students with EBD in a general education classroom.
Many students classified under ED are also diagnosed with other disabilities. Almost two thirds of both elementary/middle school and secondary students with ED (64.9% and 63.1% respectively) are reported to also have attention deficit disorder (ADD) or attention deficit hyperactivity disorder (ADHD; Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005). Furthermore, 24.9% of elementary/middle school children and 29.9% of secondary adolescents with ED are reported to have a learning disability (Wagner et al., 2005).

**Behavioral and Social Characteristics**

Students with EBD tend to exhibit various problems, primarily related to social, personal, and educational issues (Cullinan & Sabornie, 2004). According to IDEA (2004), students with ED encompass diverse behavior, emotional, and cognition problems. Children and teens with EBD are more often recognized for their externalizing, antisocial behaviors. Antisocial behavior refers to the opposite of prosocial behavior and includes aggressive, coercive behaviors that often hinder the development of positive relationships with peers and adults (Lane, Menzies, Oakes, & Kalberg, 2012). Externalizing behaviors are more acknowledged due to the frequency in which they disrupt classroom instruction and capture teacher attention. Consequently, students with internalizing behaviors are at times overlooked due to the covert nature of their behavior challenges (Lane, Menzies, Oakes, & Kalberg, 2012). Internalizing behaviors tend to be directed inward and include anxiety, depression, social withdrawal, and self-inflicted pain (Gresham & Kern, 2004; Morris et al., 2002).

In elementary schools, students with ED portray higher levels of behavioral problems and lower social competence than their peers without disabilities (Gresham & MacMillan, 1997). Relative to their typically developing peers and students with other disabilities, adolescents with ED have more relationship problems (e.g., more likely to be rejected than their peers), inappropriate behaviors (e.g., disruptiveness, fighting, disobedience), and social maladjustments
(e.g., manifest high levels of antisocial behaviors outside of school; Cullinan, Evans, Epstein, & Ryser, 2003; Cullinan & Sabornie, 2004).

**Academic Characteristics**

In addition to vast behavioral and social patterns, students with or at-risk of EBD are also characterized by their academic deficiencies. Poor academic achievement for students with ED begins at an early juncture in their educational career. Specifically, elementary-aged students with EBD tend to maintain poor rates of academic engagement and overall sub-average achievement (Lane, Wehby, Menzies, Gregg, et al., 2002). As students with EBD continue to move through the educational system into middle and high school, they demonstrate significant academic deficits in the domains of reading comprehension, math, written language, and vocabulary (Coutinho, 1986; Nelson, Benner, Lane, & Smith, 2004). Furthermore, 58% of children with ED performed below grade in reading and 93% performed below grade level in math (Greenbaum et al., 1996). Additionally, 50-70% of youth and adolescents with ED have co-morbid speech, language, and/or communication disorders (Benner, Nelson, & Epstein, 2002; McCabe & Meller, 2004), illustrating how students struggle to some degree with receptive and expressive language skills (Wagner et al., 2005). This is concerning since successful language achievement is a prerequisite for reading acquisition and academic success (Catts, Adolf, & Weismer, 2006). Moreover, it is especially troubling that students with EBD have such poor reading achievement outcomes as it is an essential skill within and beyond a school context. In absence of intervention, children who are not proficient readers by the end of first grade have a high probability (88%) of remaining a poor reader by end of fourth grade which invariably hinders academic success throughout a child’s lifetime (Juel, 1998).

Compared to adolescents in any other exceptionality subgroup, students with ED demonstrate inferior academic performance earning lower grade point averages, higher rates of
course failures, and greater frequencies of retention (Landrum et al., 2003). Without effective interventions to support these students, academic deficiencies remain stable (Mattison, Hooper, & Glassberg, 2002) or worsen over time (Nelson, Benner, et al., 2004).

Outcomes for Students with EBD

The serious nature of behavioral, social, and academic characteristics associated with EBD contributes to bleak futures for these adolescents. In the absence of detection or intervention, research suggests as students move further into their educational career poor academic and behavior patterns become increasingly stable and more resistant to intervention (Lane, Menzies, Munton, Von Duering, & English, 2005). Furthermore, failure to detect and address antisocial behavioral patterns by the end of third grade will most likely result in chronic conditions, requiring lifelong supports and interventions (Walker, Ramsey, & Gresham, 2004). The U.S. Department of Education (2001) reported students with ED have the highest drop out rate (51%) compared to all other disabilities and only 42% graduate with a diploma. When transitioning into life after high school, students with ED are subject to disappointing outcomes. These individuals experience low rates of participation in post secondary education (Wagner et al., 2003), higher levels of unemployment and underemployment (Bullis & Cheney, 1999; Carter & Wehby, 2003), poor civic and community participation (Armstrong, Dedrick, & Greenbaum, 2003), and elevated rates of incarceration (U.S. Department of Health and Human Services, 1999). Disappointing outcomes as such make it imperative that students are identified as early as possible in their educational careers due to the severity in which EBD can hinder academic, behavioral, and social success.

Positive Behavior Interventions and Supports

Throughout the last couple decades, there has been a growing need for safety, structure, and support in schools due to increasing violence, disciplinary actions, and bullying (National
Center for Education Statistics, 2013). The research based model, Positive Behavior Interventions and Supports (PBIS; Sugai & Horner, 2002) is a proactive approach to managing and intervening with behavioral patterns for students with and without disabilities (Walker et al., 1996). PBIS is a three-tiered continuum of behavior prevention for all students that increases in intensity up to highly individualized supports. School leadership teams rely on school-wide data to drive decision making for students who need more targeted supports. This model is designed from the perspectives of the whole school, classroom, non-classroom, and individual student to increase achievement for social and learning outcomes while preventing problem behavior (Sugai & Horner, 2002). Furthermore, this model is designed with an emphasis at the primary level to prevent harm, at the secondary level to reverse harm, and at the tertiary level to reduce harm (Sugai & Horner, 2002).

**Tier 1.** The first tier of PBIS is the universal, school-wide level of support provided for every student across all settings. All staff members, teachers, and students participate in direct and practiced instruction of three-to-five positively stated school-wide expectations that support prosocial replacement behaviors in the classroom and non-classroom settings (Lane, Menzies, Oakes, & Kalberg, 2012). Within each classroom, teachers positively reinforce rules and expectations with tangible (e.g., homework pass, school supplies) and nontangible methods (e.g., lunch with the principal; extra computer time). According to Sugai and Horner (2002), primary prevention is successful for about 80% of students. Students non-responsive at this level are identified according to school-wide data, such as office discipline referrals (ODRs) and systematic screening for targeted secondary or tertiary levels of support.

**Tier 2.** The secondary level of prevention is aimed toward students whose behavior requires more intensive supports that follow an instructional model where additional behavioral skills are taught in a small, more focused group, and additional organization structures through
self-management or mentoring programs (Lewis, Jones, Horner, & Sugai, 2010). The students identified for secondary prevention efforts are not displaying intense and chronic behavior problems, but are non-responsive to primary level supports (Horner & Sugai, 2005). For example, implementing a Tier 2 self-monitoring procedure where students check in and out across classes with their teachers led to a decrease in problem behavior and increases in attendance, work completion, and academic performance (Hawken & Horner 2003; Hawken, MacLeod, & Rawlings, 2007). These supports and others are directly linked to school-wide expectations and follow the PBIS instructional model. Typically, 15% of students respond successfully to this secondary level of support in school settings (Lane, Menzies, Ennis, & Bezdek, 2013). School-site leadership teams regularly progress monitoring student performance using various behavior data to drive the decision making process for how a child may continue to receive supports.

**Tier 3.** The most intensive and individualized level of support in the PBIS framework is the tertiary prevention level. Generally, 1-5% of students are expected to require this level of support (Lane, Oakes, et al., 2010). Students identified for tertiary supports are non-responsive to primary and secondary levels of prevention and are at risk for school failure and emotional/behavioral disorders (Nelson, Benner, et al., 2004). Supports at this level may include a function-based assessment (FBA) to develop a behavior intervention plan (BIP).

**Response-To-Intervention**

Response to Intervention (RtI; D. Fuchs & Fuchs, 2006) is a three-tiered model of prevention designed to focus on delivery of early interventions and supports for all children and youth prior to school failure as reflected in IDEA (2004). According to D. Fuchs and Fuchs (2006), most school teams utilize RtI as means to address academic problems, not issues related to behavior. While RtI can be applied across content areas, interventions are most commonly
associated with reading and math. Since original development, 43 states have RtI practices written into state rules, and over 60% of school districts use some level of RtI implementation (Spectrum K12, 2010). Like PBIS and Comprehensive, Integrated, Three-Tiered Models of Prevention (CI3T; Lane, Oakes, et al., 2010), RtI is organized along a continuum of three tiers that increases in intensity and performance is closely monitored to make data-driven decisions to support students. As the literature continues to expand, there is substantial research related to the effectiveness of RtI (e.g., Burns, Appleton, & Stehouwer, 2005); specific interventions and results (e.g., Klingner & Edwards, 2006; Lane, Little, Redding-Rhodes, Phillips, & Welsh, 2007; Oakes, Mathur, & Lane, 2010); and differing approaches to RtI implementation (e.g., D. Fuchs, Fuchs, & Stecker, 2010).

**Tier 1.** At the primary level of prevention in the RtI framework, effective evidence-based instruction is provided to all students. Similar to PBIS, approximately 80% of a student population benefits from Tier 1 instructional practices. By the end of the first grading period, all students are screened to determine who might need Tier 2 supports. Some academic tools utilized for screening and progress monitoring for reading include curriculum-based measurements are AIMSweb (Pearson Education, 2008), and Dynamic Indicators of Basic Early Literacy Skills (DIBELS; Good & Kaminski, 2002) or other standardized achievement assessments. Information found from these assessments are then compared to national benchmarks to determine whether students are performing below standards and require more intensive interventions and supports.

**Tier 2.** Tier 2 interventions apply to students who do not meet grade-level expectations according to various academic assessment measures. Effective Tier 2 interventions are “explicit and systematic and occur from 3 to 5 days a week for at least 20 minutes each day” (L. S. Fuchs & Vaughn, 2012). These interventions can occur either inside or outside the classroom and are
sufficient for about 10-15% of a student body (Basham et al., 2010). To determine the effectiveness of Tier 2 interventions, teachers monitor progress and administer a curriculum-based measurement tool. Results from the assessment will indicate if a student should move on to the most intensive intervention (Tier 3), remain in Tier 2, or move back to Tier 1.

**Tier 3.** Students identified for Tier 3 receive the most intensive individualized support. Customized supports are designed to help improve academic deficit. Interventions should be regularly monitored using curriculum-based measures. At this level a student may be referred to special education services for a comprehensive evaluation. Students are likely exposed to multiple risk factors when receiving this level of support. Based on data analysis at this level, a student can move back to Tier 2 or Tier 1 interventions if ample progress has been made.

**Comprehensive, Integrated, Three-Tiered Models of Prevention**

The CI3T model is a research-based multi-tiered system of support (MTSS) that blends features from both RtI and PBIS to address academic, behavior, and social skills programming together within an integrated framework to fully inform and enhance prevention and intervention efforts (Oakes, Lane, Jenkins, & Booker, 2013). This integrated framework provides detailed procedures for designing, implementing, and evaluating school wide systems through a data-based approach that encompasses input from all key stakeholders (Lane, Oakes, & Magill, 2014). The CI3T model includes a leadership team consisting of an administrator, general education teachers, special education teachers, parents, and students who all offer unique and relevant perspectives necessary to design a successful CI3T primary prevention plan. The ongoing collaboration and communication of leadership teams and school-site teams ensure all components of this model are adequately addressed when planning and implementing the plan.

As the plan is implemented, treatment integrity, social validity, systematic screening tools, and other data sources are continuously assessed to ensure overall success (Lane, Oakes, &
Magill, 2014). Specifically, treatment integrity refers to implementing a program as it was intended in order to produce success; whereas social validity refers to the acceptability and satisfaction of proposed primary prevention plan held by key stakeholders (Lane, Oakes, & Magill, 2014). Data collected for social validity and treatment integrity are used to inform revisions of a CI3T plan, but not while it is being implemented as this hinders accurate evaluation of practice (Lane, Oakes, & Magill, 2014). By focusing on the academic, behavior, and social domains together, school-site teams can “search and serve” more accurately by reducing the likelihood of a student going through school unidentified for the additional support needed.

**Tier 1.** The primary prevention plan for CI3T contains academic, behavioral, and social components constructed to meet all students’ needs within the various school environments required for school success. Like other models, primary prevention will be sufficient for reach approximately 80% of students (Lane, Oakes, et al., 2010) and ideally, efforts implemented within Tier 1 will prevent academic, behavior, and social problems before they occur. Primary prevention provides instruction to all students through a research-based curriculum that meet the Common Core State Standards and/or district standards for learning in each content area (Oakes et al., 2013). The curriculum must be rigorous enough to ensure there is adequate evidence the content delivered will improve academic achievement when implemented as intended (Lane, Menzies, et al., 2013). Similar to the academic component of primary prevention is the social skills component in which an evidence-based program is selected that possibly focuses on developing character, teaching social skills or preventing violence as long as the curricula selected aligns with school or district goals (Lane, Menzies, et al., 2013). Additionally, it is imperative that whichever social skills curriculum is chosen be well-researched so that the desired outcomes are achieved when implemented as intended. The behavioral component of
CI3T is a PBIS framework, not a curriculum (Lane, Menzies, et al., 2013). Leadership teams at school-sites and at the district level establish three to five positively stated universal expectations. It is recommended that a data-based approach be implemented when establishing and defining the universal expectations by surveying all staff and administration in a specific school-site to determine the school community perspective for what specific positive behaviors are essential for students to be successful across all settings in the academic building (Lane, Menzies, et al., 2013). Once expectations are established, teachers will explicitly teach the expected behaviors across all settings and provide opportunities for students to practice and receive reinforcement (Lane, Oakes, & Magill, 2014). Students receive behavior specific praise statements (BSPS) as reinforcement for when they meet expectations. Often, schools develop a PBIS framework where adults provide a PBIS ticket paired with BSPS when a student is modeling a given expectation (Lane, Menzies, et al., 2013).

School data collection systems are utilized as part of regular school practices to determine which students are non-responsive at the CI3T primary level. Schools use screening tools such as AIMSweb (Pearson Education, 2008) or DIBELS (Good & Kaminski, 2002) to monitor the extent to which students are performing and progressing in core content areas. General education teachers use information from academic screening tools administered three times a year (fall, winter, spring) to determine if student achievement is occurring at the expected rate. Students who fall below benchmark expectations are provided Tier 2 or Tier 3 supports to meet specific needs. To address the behavioral and social domains, students are identified for additional support through regular school data collection systems such as ODRs and systematic behavior screening tools (e.g., Student Risk Screening Scale [SRSS], Drummond 1994). The systematic behavioral screening tools are also administered three times a school year (fall, winter, spring) to better determine which students are non-responsive to Tier 1 efforts.
Collectively, all data should be analyzed in tandem to identify more accurately students demonstrating deficits in any of the three domains of the CI3T model as this is a comprehensive data-driven decision making process.

Furthermore, CI3T models are strengthened by essential instructional and classroom management skills teachers already use to improve student outcomes (Lane, Menzies, et al., 2013). That is, teachers should consider the manner in which they organize and manage the academic and behavioral components of instruction at a Tier 1 level before focusing on more intensive, individualized supports. Teachers need the knowledge of effective classroom academic and behavioral instructional strategies to address the unique needs of all students. Specifically, teachers can use powerful classroom strategies such as opportunities to respond (OTRs), active supervision, proximity, BSPS, and self-regulated interventions to promote positive behaviors and facilitate instruction (Lane, Menzies, et al., 2013).

**Tier 2.** In the secondary level of prevention of the CI3T model, Tier 2 supports are offered for some students, 10-15% (Lane, Menzies, et al., 2013), who are non-responsive to primary level preventions according to academic, behavioral, and social screening measures. Moreover, Tier 2 includes low to moderate intensity level supports that are considered additive in nature to Tier 1, not replacing them (Lane, Menzies, et al., 2013). Academic, behavioral, and social supports may be implemented in conjunction with each other to sufficiently intervene with students identified as non-responsive. Students who receive this level of support may participate in small groups to focus on a specialized skill to meet their academic, behavioral, and/or social need or receive more individualized behavior support such as with a self-management strategy (e.g., Menzies, Lane, & Lee, 2009). Secondary interventions are monitored on a frequent, weekly basis to analyze progress more closely and determine effectiveness of intervention. Based on the incremental progress of a student and next round of screening data (fall, winter, or
spring), he or she may receive an increased, decreased, or the same level of support at Tier 2 to best meet his/her needs. At any point when school sites analyze the fall, winter, and spring data and determine more than 15% of the student population appear to need Tier 2 intervention efforts, the leadership team should re-direct their focus back to Tier 1 to make improvements in order to strengthen the core components of the model. It is critical when establishing Tier 2 supports to provide a clear description of the support offered (i.e., who will do what, with whom, under what condition) including specific details pertaining to inclusion criteria, exit criteria, and method of progress monitoring (Lane, Oakes, & Magill, 2014).

**Tier 3.** Tier 3 preventions efforts within the CI3T model are for the few students, about 5% of the student population, demonstrating the greatest need academically, behaviorally, and/or socially and are exposed to multiple risk factors (Lane, Oakes et al., 2010). Interventions at this level are highly intensive and individualized. Here, students may receive functional assessment based interventions (FABI; Umbreit, Ferro, Liaupsin, & Lane, 2007) or one-on-one interventions in specific areas of deficit. Again, students receiving this level of support will regularly participate in progress monitoring assessments to examine the utility of interventions. Furthermore, effective interventions should be executed with treatment fidelity for the best academic, behavioral, and social outcomes.

**Systematic Behavioral Screening Tools**

Systematic behavioral screening tools are essential components of CI3T models of prevention and intervention. These measures address the charge often overlooked, accurate identification of students who require Tier 2 and Tier 3 supports (Lane, Oakes, et al., 2010). Screeners are effective tools for early and accurate identification across the PK-12 continuum and should be utilized at elementary, middle, and high school to address the demands that students convey (Lane, Oakes, et al., 2010). For example, at the elementary age, behavioral
screeners can be used to more accurately identify a kindergartener struggling with the initial transition into school, where he/she might struggle to delay his/her own wants as a teacher focuses on the needs of the whole group (Hemmeter, Ostrosky, & Fox, 2006).

Systematic behavior screening tools are psychometrically sound measurements characterized by the core validity and reliability properties they possess (American Educational Research Association [AERA], American Psychological Association [APA], & National Council for Measurement in Education [NCME], 1999), utilized to identify students with externalizing, internalizing, or comorbid behavioral patterns. In terms of validity, a tool is valid according to the evidence that supports the use and interpretations of test scores (AERA, APA, & NCME, 1999). Reliability refers to the level to which a test, when administered from different perspectives or multiple times, produces consistent results (Hatcher & Stepanski, 1994).

Together, these properties drive decision-making in schools and districts illustrating how student risk status is shifting over time (Lane, Menzies, Oakes, & Kalberg, 2012). The feasibility of a systematic screening tool must also be considered. Specifically, the tool must be reasonable in reference to time, cost, and effort when addressing matters of preparation, administration, scoring, and interpretation (Lane, Kalberg, Parks, & Carter, 2008; Lane, Parks, Kalberg, & Carter, 2007). Moreover, the strong psychometric properties of a systematic screening tool help eliminate the chance students are overlooked.

Behavior screenings can detect students who show patterns of internalizing, externalizing, or comorbid patterns of behavior. It is recommended that behavior screening tools be administered three-times a school year (fall, winter, spring) to examine behavioral performance patterns over time to indicate how students improved, declined, or remained stable while receiving prevention and intervention efforts within a multi-tiered model of support (e.g., CI3T). Behavior screening tools are advantageous for educational systems with their ability to
support teachers by eliminating the pressure of potentially missing a student who needs additional support and provide students equal access to secondary and tertiary supports (Lane, Menzies, Oakes, & Kalberg, 2012). Furthermore, behavior screeners can help support students struggling to adjust to the various transitional periods within and across elementary, middle, and high school levels. Six psychometrically sound systemic screening tools currently utilized across the nation include: SRSS (Drummond, 1994), SRSS-IE (Lane, Oakes, Harris, et al., 2012), the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997), the Systematic Screener for Behavior Disorders (SSBD; Walker & Severson, 1992); Early Screening Project (ESP; Walker, Severson, & Feil, 1995), Behavior Assessment System for Children, Second Edition, Behavioral and Emotional Screening System (BASC-2 BESS; Kamphaus & Reynolds, 2007), and Social Skills Improvement System: Performance Screening Guide (SSiS-PSG; Elliott & Gresham, 2007). Data from these measurement tools are used to drive prevention, intervention, instructional efforts, and show how student risk status shifts over time.

**Systematic Screening for Behavior Disorders.** The SSBD (Walker & Severson, 1992) is a multi-gated measurement tool designed to detect students who have either internalizing or externalizing behavior patterns at the elementary level between first through sixth grade. This tool can be utilized to detect students efficiently who demonstrate mild signs of behavioral patterns indicative of future negative outcomes. The SSBD is a cost effective tool consisting of three stages: (a) nomination and rank ordering, (b) teacher ratings, and (c) direct observations. When a student exceeds normative criteria by passing through Gate 2 or Gate 3 they may require additional supports in the form of secondary or tertiary prevention efforts. This tool comes in a paper-pencil format, but the electronic version will soon be available. SSBD data can be utilized in conjunction with academic data to determine students for secondary and tertiary levels of prevention within a multi-tiered model. Supporting research demonstrates SSBD to be reliable,
valid, and feasible (e.g., Lane, Little, et al., 2009; Walker et al., 1994; Walker et al., 1990).

Moreover, researchers have expanded the literature to examine the effectiveness of SSBD to
detect students at risk for internalizing and externalizing behavior patterns within the context of
primary prevention plans and multi-tiered models.

Early application of the SSBD was conducted to examine the effectiveness of a primary
prevention program for elementary students identified with or at risk of EBD according to the
high scores on the teacher nomination scale (Kamps, Kravits, Rauch, Kamps, & Chung, 2000;
Kamps, Kravits, Stolze, & Swaggart, 1999). The primary prevention program consisted of a
classroom management component, social skills training, and peer tutoring in reading. Utilizing
direct observation procedures, findings from both studies indicate intervention was successful
according to improved performance in positive recess interaction and play, aggression, out-of-
seat behaviors, and reduced disruptions. Furthermore, results revealed the students’ behaviors
over the project period illustrated increased student achievement and reduced problem behaviors
(Kamps et al., 2000; Kamps et al., 1999).

In addition, researchers have conducted studies using the SSBD as one of the measures to
identify and support students non responsive at the primary prevention plan level. Cheney,
Flower, and Templeton (2008) investigated the effects of a social-behavioral intervention,
Check, Connect, and Expect (CCE; Cheney & Stage, 2004), implemented for students identified
at risk for behavioral and academic failure according to scores on the SSBD within an RtI model
of prevention. The intervention aimed to improve students’ social behaviors by meeting desired
social expectations of the school and classroom. Results revealed 67% of students responded to
the intervention and more than 50% of the students showed decreases in problem behaviors.
Thus, this study suggests that CCE supports students’ social emotional and behavioral needs with
initial success maintaining these students in a general education setting.
Furthermore, SSBD has been utilized within three-tiered models of prevention to evaluate risk. Walker, Cheney, Stage, and Blum (2005) examined a well-established primary prevention plan to determine how risk status stabilized, increased, or decreased over time. Often, the SSBD and SRSS screening tools are used in conjunction to determine responsiveness of students within multi-tiered models of prevention and to monitor overall risk overtime (review to follow).

**Early Screening Project.** The ESP (Walker et al., 1995) is a screening tool used to detect preschool and kindergarten students between ages 3 and 5 that exhibit internalizing or externalizing behavior patterns through a multi-gating system like that of the SSBD. Similar to SSBD, ESP contains three stages including: nominations and rank ordering, teacher ratings, and direct observations and parent questionnaire (optional). In contrast to the SSBD, the ESP should be completed by teachers no less than 30 days after they have worked with each child (Walker et al., 1995). To support the utility of ESP, various studies established the validity and reliability of the tool within the preschool context (e.g., Feil, Severson, & Walker, 1995, 1998). To date, there are multiple studies that utilize ESP to identify and support young children who require more than primary prevention efforts.

The ESP has been vastly used in the research community to identify pre-school and kindergarten age students at risk for EBD to participate in an early intervention program, First Step to Success (FSS; Walker et al., 1997). The FSS is constructed to provide secondary prevention efforts for Pre-K and kindergarten students demonstrating signs of emerging antisocial behavioral patterns. Studies conducted in kindergarten classrooms using ESP as a the primary screening tool found FSS to be an effective intervention (Golly, Stiller, & Walker, 1998; Walker et al., 1998) for improving academic engagement time, reducing rates of discrete problem behaviors, and increased rates of positive social skills (e.g., Gunn, Feil, Seeley,
In addition, the ESP and DIBELS have been used to identify students with reading and behavioral problems for participation in Stepping Stones to Literacy (Nelson, Cooper, & Gonzalez, 2004), a pre-reading intervention. Studies found significant improvements in phonological awareness, word reading, and rapid naming (Nelson, Benner, & Gonzalez, 2005; Nelson, Stage, Epstein, & Pierce, 2005).

**Strengths and Difficulties Questionnaire.** The SDQ (Goodman, 1997), is a no-cost, measurement tool constructed for use with students between ages 3 and 16. While screening tools like the SSBD and ESP focus on externalizing and internalizing behaviors, this 25-item screening tool assesses a broad set of four problem behavior domains including conduct problems, hyperactivity, peer problems, and emotional symptoms, and one desirable behavior domain, pro-social behavior. In contrast to SSBD, ESP, and SRSS, the SDQ considers input from multiple stakeholders, teacher, parent, and student perspectives to assess a given individual’s behavioral performance (Lane, Menzies, Oakes, & Kalberg, 2012). The 25 items are positively or negatively phrased statements about behavior rated on a 3-point Likert-type scale ranging from 0 = not true, 1 = somewhat true, or 2 = certainly true to determine occurrence of each behavior. Extensive research has been conducted worldwide (Australia, Britain, Finland, Germany, Sweden, and the United States) to determine the reliability and validity of each form of the SDQ tool across grade levels (see www.sdqinfo.org for entirety). Recently, psychometric rigor studies have been conducted at the elementary (Ennis, Lane, & Oakes, 2012), middle school (Lane, Parks, et al., 2007) and high school (Lane, Kalberg, Parks, et al., 2008) levels to further support the validity of the tool and demonstrate the convergent validity of SDQ and SRSS. Unfortunately, some teachers described the SDQ as too resource intensive with respect to
preparation, administration, and scoring (Lane, Kalberg, Parks, et al., 2008). Currently, literature
does not provide a thorough range of descriptive studies conducted for SDQ application within
three-tiered models of prevention compared to other screening tools.

A study conducted at a middle school utilized SDQ and SRSS data to assess overall
levels of risk present and to identify students for possible support in secondary and tertiary
prevention efforts within a PBIS model (Lane, Kalberg, et al., 2010). Two years of consecutive
fall SDQ screening scores were compared and PBIS data were analyzed to assess the percentage
of students scoring in abnormal or borderline ranges to determine which students might be better
served with additional supports. Results suggested improvements in prosocial behavior and in
peer interactions due to the decreased percentage of students in the abnormal range and increased
percentage of students in the normal range on the Peer Problem subscale (Lane, Kalberg, et al.,
2010). Although this study illustrated behavioral improvements, analyzing the behavior data in
conjunction with academic data allows for detection of students with deficits in both domains.

More recently, Ennis, Jolivette, and Boden (2013) examined scores on the SDQ and
SSBD to determine risk status before evaluating the effects of the Self-Regulated Strategy for
Development (SRSD; Harris & Graham, 1996) for persuasive writing with elementary students
with EBD in a residential facility as a secondary intervention effort within a PBIS model.
Findings indicate the SRSD for persuasive writing intervention improved student responses for
elements, quality, and length. Other behavioral screenings have been used in conjunction with
SRSD to evaluate risk and assess writing achievement (further studies to follow).

**Behavior Assessment System for Children, Second Edition, Behavioral and
Emotional Screening System.** The BASC-2 BESS (Kamphaus & Reynolds, 2007) is a
screening tool utilized with students across the PK-12 continuum to detect and manage
emotional and behavioral abilities. This tool was constructed from items on the BASC-2 to
create a comprehensive system that effectively detects students for support within the context of three-tiered models of prevention (Lane, Menzies, Oakes, & Kalberg, 2012). The family of BASC-2 BESS components offer a systematic approach to screen, assess, intervene, and monitor progress of students with challenging behavioral and social patterns. Similar to the SDQ, BASC-2 BESS includes teacher, parent, and student (age depending) report forms. The BASC-2 BESS is easy to administer, but rather costly. Since this instrument is recently available to the research and teaching communities, only a few peer reviewed articles are available. Early studies completed to enhance the preschool (DiStefano & Kamphaus, 2007) and elementary (Kamphaus, Thorpe, et al., 2007) versions of the BASC-2 BESS provided initial evidence of the reliability of validity of these tools. Most recently, at the middle school level Chin, Dowdy, and Quirk (2013) found BASC-2 BESS scores significantly predicted (p < .001) students’ behavioral outcomes. Moreover, results suggest that the BASC-2 BESS could be used as an initial universal screening tool to identify middle-school students who may be at increased risk of experiencing later behavior problems (Chin, Dowdy, & Quirk, 2013). Last, recent studies illustrate how the BASC-2 BESS is a more effective approach in identifying students at risk for EBD in an elementary setting compared to earlier traditional, teacher referral detection methods (Dowdy, Dever, DiStefano, & Chin, 2011; Eklund et al., 2009). Unfortunately, the educational research community is still in absence of studies utilizing the BASC-2 BESS as part of a three-tiered model of prevention to determine responsiveness of students receiving secondary (Tier 2) and tertiary (Tier 3) level supports.

**Social Skills Improvement System: Performance Screening Guide.** The SSIS-PSG (Elliott & Gresham, 2007) is a measurement tool utilized for PK to 12th grade students to gather information across four domains including prosocial behavior, motivation to learn, reading skills, and math skills. Additionally, SSIS-PSG can be utilized to collect baseline information about
students’ academic and social behavior as well as monitor progress throughout a school year (Lane, Menzies, Oakes, & Kalberg, 2012). This multicomponent program, similar to the BASC-2 BESS, contains an array of products that allow for the use of the tool within the context of multi-tiered models to support the development of social skills. Initial validation studies support reliability and validity of this screening tool (e.g. Gresham & Elliott, 2008; Kettler, Elliott, Davies, & Griffin, 2009). Like the BASC-2 BESS screening tool, the SSiS-PSG is only recently available to the research and education community and to date there are no published studies examining the application of the SSiS-PSG as part of a three-tiered model of prevention to support students at secondary and tertiary levels. However, the SSiS-PSG has been used in conjunction with the SRSS-IE to investigate treatment integrity of PBIS and RtI models.

**Student Risk Screening Scale.** The SRSS (Drummond, 1994) is a no-cost tool originally developed to detect elementary-aged students (K-6) at risk for antisocial behavior patterns. Using an excel spreadsheet, teachers individually rate students in a 10-15 minute period over the seven externalizing items using a 4-point Likert-type scale: never = 0, occasionally = 1, sometimes = 2, frequently = 3. These items include: (a) steal; (b) lie, cheat, sneak; (c) behavior problem; (d) peer rejection; (e) low academic achievement; (f) negative attitude; and (g) aggressive behavior. The ratings added together produce a score ranging from 0 to 21 with higher scores indicating higher levels of risk: low (0 - 3), moderate (4 - 8), and high (9 - 21).

Since its initial development, evidence supports the SRSS as a feasible and psychometrically sound systematic screening tool utilized to identify K-6 students demonstrating behaviors predictive of antisocial patterns (Drummond, Eddy, & Reid, 1998). Drummond, Eddy, Reid, and Bank (1994) found SRSS total scores predicted negative behavior and academic outcomes up to 10 years. Additional validation studies conducted for the SRSS provide evidence for social validity (e.g., Lane, Bruhn, Eisner, & Kalberg, 2010) and indicate the SRSS improved
chance estimates by 30% for students with internalizing behavior patterns as measured through Stage 2 on the SSBD (Lane, Little, et al., 2009).

The SRSS has been validated for use at the elementary (e.g., Drummond et al., 1998), middle (Lane, Parks, et al., 2007) and high school levels (Lane et al., 2011; Lane, Kalberg, Parks, et al., 2008). Specifically, the individual student scores calculated allow for school teams to determine the types of secondary or tertiary interventions a student may require to support the specific need if the level of risk showed unresponsiveness to the universal prevention plan. Also, the SRSS total scores can be utilized to monitor the level of risk over time within a school building (e.g., Lane, Kalberg, Bruhn, Mahoney, & Driscoll, 2008). The SRSS has been used widely in studies to (a) determine the responsiveness of students within the context of multi-tiered models of prevention, (b) illustrate how a school’s risk shifts over time, and (c) assess overall index of risk evident within a school.

In areas of reading, the effects of a supplemental early literacy program, Scholastic’s Phonics Chapter Books (Shefelbine, 1998), were examined for students unresponsive to comprehensive school-wide interventions as indicated by high levels of risk on the SRSS and poor performance in early literacy skills according to teacher reports (Lane, Menzies, et al., 2005; Lane, Wehby, et al., 2002). Students received early literacy intervention in a small group instructional setting within the general education classroom. Results from both studies revealed growth in areas of onset fluency, nonsense word fluency, and decreases in the rate of total disruptive behavior.

In looking at early literacy skills, Lane, Little, et al. (2007) examined the effectiveness of Peer Assisted Learning Strategies (PALS; D. Fuchs, Fuchs, Mathes, & Simmons, 1997) as a supplemental reading intervention for first grade students non-responsive to Tier 2 interventions indicated by scores on the SRSS, SSBD, or Child Behavior Check List-Teacher Report Form.
(Achenbach, 1991) and reading scores at or below the 25th percentile on Woodcock Johnson III (WJ-III; Woodcock, McGrew, & Mather, 2001). Classroom teachers paired strong readers with weak readers to work on decoding and reading fluency. Findings indicated that students made lasting increases in oral reading fluency, but only several participants demonstrated improvements in academic engagement. This was an initial study conducted with the classroom teacher implementing the intervention.

Several studies focused on social skill interventions using the SRSS as the primary behavioral screening tool. The effects of explicit small group social skill instruction were explored for first grade students non-responsive to a school-wide intervention according to high levels of risk on the SRSS and other school-wide data (Lane, Wehby, et al., 2003). Findings indicated intervention led to decreases in total disruptive behavior and increases of academic engagement time in the classroom, and decreased negative social interactions on the playground.

At the middle school level, Robertson and Lane (2007), and Kalberg, Lane, and Lambert (2012) investigated the effects of study skills and conflict resolution intervention efforts for students non-responsive to a school wide PBIS program according to moderate to high risk ratings on the SRSS and other regularly collected school data pieces. Students received either direct instruction from the Productive Conflict Resolution Program (School Mediation Center, 1998) or from a developed study skills curriculum focused on strategies to acquire and demonstrate knowledge (Deschler et al., 2001). Similarly, both studies (Kalberg et al, 2012; Robertson & Lane, 2007) found only nominal changes in outcome were achieved with low magnitude increases in knowledge of study skills and slight improvements in knowledge of conflict resolution skills based on scores from the Acquiring Knowledge, Demonstrating Knowledge, and Conflict Resolution (Lane, 2003), Study Habits Inventory (SHI; Jones & Slate, 1990), and Conflict Talk (Kimsey & Fuller, 2003) assessments.
Writing interventions have been explored at the elementary level for students non-responsive to a school-wide PBIS program indicated by moderate-to-high risk levels on the SRSS, exceeded normative criteria on the SSBD, or scores at or below 25th percentile on the Test of Written Language-3 (TOWL-3; Hammill & Larsen, 1996; Lane, Harris, et al., 2008; Little et al., 2010). Utilizing SRSD researchers examined the model’s effectiveness on story (Lane, Harris, et al., 2008) and persuasive (Little et al., 2010) writing genres for students at risk for EBD in one-on-one instructional settings. Findings from both studies revealed the utility of SRSD for students exhibiting behavioral and writing concerns as an effective secondary academic intervention in a PBIS context. Furthermore, results from each study illustrate strong improvements in genre specific elements, length, and overall quality according to monitored writing prompts.

Several studies examined the effectiveness of multiple interventions utilized in tandem to support students with elevated levels of risk according to the SRSS. Lane and Menzies (2005) evaluated the effectiveness of supplemental literacy (Scholastic’s Phonics Chapter Books; Shefelbine, 1998) and social skill (Social Skills Intervention Guide: Practical Strategies for Social Skills Training; Elliott & Gresham, 1991) interventions for elementary students non-responsive to school-wide primary prevention efforts indicated by elevated levels of risk on the SRSS. Identified students received direct or small group supplemental instruction to support academic and behavioral deficits. Findings reveal that students with academic and behavioral concerns made more significant progress on reading measures compared to the typical performance group, plus the interventions generated changes in overall risk levels and writing skills.

Lane, Capizzi, Fisher, and Ennis (2012) explored the impact of the Behavior Education Program (BEP; Hawken et al., 2007) with four middle school students non-responsive to a
comprehensive, integrated, primary prevention plan as exhibited by moderate-to-high levels of risk on the SRSS and low levels of work completion. Daily progress reports were used for students to check-in and check-out to rate their performance and compliance of school rules and completion of work in all class periods. Findings support a functional relation between the introduction of the BEP and changes in students’ behaviors for three out of four participants; specifically performance increased to match the reinforcement criterion established in each phase (Lane, Capizzi, et al., 2012).

Oakes, Mathur, and Lane (2010), examined the effectiveness of secondary fluency interventions for elementary students with challenging behavioral patterns according to inadequate DIBELS, oral reading fluency (ORF), and elevated levels of risk on the SRSS. Identified students received instruction from *Fundations: Wilson Language Basics for K-3* (Wilson, 2002) and *Voyager’s Blastoff to Reading* (Voyager Expanded Learning, 2004) in conjunction with participation in a response-cost behavior support plan. Findings indicate 89% of participants demonstrated improvements in ORF. The tandem intervention produced meaningful academic outcomes thus supporting pairing positive behavioral supports with targeted small group instruction (Oakes, Mathur, et al., 2010).

The SRSS has also been used to monitor the effects of function-based interventions (Umbreit et al., 2007) implemented within the context of three-tiered models of support for students at the elementary (Lane, Eisner, et al., 2009) and middle school (Lane, Rogers, et al., 2007) level non-responsive to less intensive interventions (Tier 1 and 2) according to school-wide data scores derived from the SRSS, SSBD, and/or other criterion referenced assessments. FBAs were performed in both studies for all participations to determine the function-based interventions. Results for both studies support a functional relationship between the introduction of the intervention and changes in behaviors for all students (Lane, Eisner, et al., 2009; Lane,
Rogers, et al., 2007). Additionally, improvements in risk level were made for the elementary students according to SRSS and SSBD scores.

Lastly, the SRSS can be used descriptively to illustrate how a school’s population risk status and overall index of risk shift over time. Lane and Menzies (2002) used the SRSS to describe how risk shifted within a school implementing PBIS from the fall to winter screenings; Lane and Menzies (2005) analyzed SRSS data after one academic year to determine how risk status shifted; Lane, Kalberg, Bruhn et al. (2008) examined the utility of a primary prevention progress at the elementary level using the SRSS (as well as SSBD) to assess the overall index of risk evident in a school site building; and Lane, Kalberg et al. (2010) evaluated a three-tiered model of prevention in a high school based on overall levels of risk determined by one consecutive year of SRSS fall data.

**Student Risk Screening Scale –Internalizing Externalizing.** The SRSS-IE is an adapted version of the SRSS (Lane, Menzies, Oakes, Lambert, et al., 2012; Lane, Oakes, Harris, et al., 2012) designed to increase the SRSS utility to also detect students with internalizing behavior patterns. The SRSS-E7 (externalizing 7-items; Drummond, 1994) subscale was extended to include seven additional items reflecting internalizing behaviors, yielding the SRSS-IE, an instrument containing 14 items. Like the SRSS, the SRSS-IE is rated on a 4-point Likert-type scale: *never* = 0, *occasionally* = 1, *sometimes* = 2, *frequently* = 3. The seven items added to the screening tool were (a) emotionally flat; (b) shy, withdrawn; (c) sad, depressed; (d) anxious; (e) obsessive-compulsive behavior; (f) lonely; and (g) self-inflicts pain (Lane, Oakes, Harris, et al., 2012). These items were added as they appear to be characteristics of students with internalizing behavior patterns for children and adolescents (Lane, Oakes, Lambert, et al., 2012). Initial evidence for reliability and validity of the SRSS-IE at the elementary level and a validation of the SRSS-IE in rural and urban elementary schools indicated only five of the seven
additional items should be retained, excluding *self-inflicts pain* and *obsessive compulsive behaviors* due to low internal consistency estimates and exploratory factor analysis (Lane, Menzies, Oakes, Lambert, et al., 2012; Lane, Oakes, Harris, et al., 2012). With five internalizing items remaining, total scores for the SRSS-I5 (internalizing 5-items; Lane, Menzies, Oakes, Lambert, et al., 2012; Lane, Oakes, Harris, et al., 2012) subscale range from 0 to 15.

Additionally, initial evidence was found supporting the reliability and validity of SRSS-IE at the middle school level (Lane, Oakes, Carter, Lambert & Jenkins, 2013). Similar to the initial validation findings at the elementary level, evidence supported the removal of the same two items, *self-inflicts pain* and *obsessive-compulsive behavior* from SRSS-IE (Lane, Oakes, et al., 2013). Initial studies for the SRSS-IE show promise for the tool to be widely investigated for further utility.

In summary, the review of literature illustrates how systematic screening tools can be utilized within the context of three-tiered models of prevention to more accurately identify and intervene with students needing additional support to achieve school success. Systematic screeners can be widely utilized across grade levels and provide reliable indications of students struggling and in need of additional support. Furthermore, the wide array of validated interventions used for identified students in the described studies support the demand for general education teachers to be more readily informed and prepared when working with students with or at risk for EBD as most of these children will be in a general education setting exhibiting complex academic, behavioral, and social characteristics in need of additional support. Furthermore, psychometric properties of the various screeners were described to indicate the strength of the tool in terms of identifying and detecting the behaviors it is designed to measure. This study aims to expand the knowledge base of the newly adapted SRSS-IE systematic screening tool by closely examining the magnitude of relation between the SRSS-IE and its
subscales to ODRs in a rural elementary school. Previous research has yet to examine the nature of relation between these two indicators of behavioral risk. Also, the initial overall levels of risk and how student risk shifted according to the SRSS-E7, SRSS-I5, and SRSS-IE12 scores will be examined.


CHAPTER III

METHOD

Participants

Participants were students ($N = 759$; see Table 1) attending the only elementary school in a rural school district located in a Midwest region during the 2012-2013 school year. Homestead Elementary School (HES) served preschool through fifth grades. However, this study focused solely on kindergarten through fifth-grade students, as preschool-age students were not screened using the Student Risk Screening Scale-Internalizing Externalizing (SRSS-IE; Lane, Oakes, Harries, et al., 2012) as this tool was not designed for use with early childhood populations. At HES, the average age of first through fifth graders was 7.82 years ($SD = 1.76$) with an insignificant difference in gender distribution (49.67% male; 50.33% female) and predominately White (89.86%, $n = 682$) student population. In addition, 14.49% ($n = 110$) of HES’s student body accessed special education services with only 0.26% ($n = 2$) served under the Individuals with Disabilities Education Improvement Act (IDEA, 2004) exceptionality classification of emotional disturbance.

Teacher participants from HES were general ($n = 36$; see Table 2) and special education ($n = 1$) teachers. At HES, the average teacher age was 33.81 years ranging from 24 to 54 ($SD = 7.84$) with 9.05 ($SD = 5.60$) mean years of teaching experience. A majority of the teacher participants (91.89%; $n = 34$) reported having taken courses in classroom management prior to this study, whereas reported participation in professional development for academic screening was 61.11% ($n = 22$) and 44.44% ($n = 16$) for behavior screening.
Setting

HES was the only elementary school in a rural locale, with all students feeding into a single middle and high school in a Midwestern state. During 2012-2013, HES was designated as a Title I school with 36.05% ($n = 274$; see Table 3) eligible for free or reduced-lunch prices and an attendance rate of 96.10%.

HES had a multi-tier system of support (MTSS) like the comprehensive, integrated, three-tiered model of prevention (CI3T; Lane, Oakes, et al., 2010) including academic, behavioral, and social components. The school was in its first year of MTSS implementation at the time of this study. Combing previously separate academic and behavior MTSS teams, the district constructed a three-tiered model built with a focus on the “whole child” to enrich basic instruction across all components to facilitate mastery and success for all students to be Safe, Outstanding, Accountable, and Respectful (S.O.A.R). The MTSS team also developed a cohesive infrastructure in terms of coaching, common terminology, and an integrated data system allowing teachers to track behavioral data (e.g., office discipline referrals [ODRs]), refer students in need of additional layers of support, and receive automatic student progress with the feedback loop component. For the 2012-2013 school year, HES primarily focused on the reading progress of each individual student while still implementing behavioral and social components of the primary prevention plan. Each tier of their MTSS model introduced practices and provided mastery level instruction during the learning process to support reading and comprehension skills.

At the time of the study, not all tiers of HES’s MTSS model were explicitly defined, thus specific tier descriptions and interventions for the behavioral and social components are not described within this paper. However, the district is in the process of securing additional professional development to receive further assistance from a local university to more thoroughly
develop the tiers (e.g., operationally defined entry and exit criteria) and appropriate interventions to support all students’ academic, social, and behavioral needs.

Within the first tier of the school’s MTSS, students received instruction directly aligning to the state standards delivered in the general education classroom with up to 30 min of extra daily enhancement to the core reading program. Specifically, this benchmark (on grade level) group contained students who have mastered the core reading curriculum and regularly performed at or above 80% on the reading summative assessment. These students have also demonstrated they reached the benchmark (grade level) score on the Dynamic Indicator of Basic Early Literacy Skills (DIBELS; Good & Kaminski, 2002), which was administered three times a year. Students were assessed on a consistent basis to determine if their individual instructional needs were being met. Based on assessment data, students were moved regularly between the three tiers to have their needs best met and to adequately support the individual reading goals of all students. In addition to the academic component, students participated in a district wide Positive Behavior Interventions and Supports (PBIS; Sugai & Horner, 2002) plan designed to support proactive school wide discipline and promote expected behaviors. The universal school expectations were for all students to S.O.A.R. These expectations were positively stated and defined across all school settings for the students to follow using a PBIS matrix (see Figure 1). Socially at Tier 1, all students received weekly Second Step (Committee for Children, 2011) social emotional learning lessons. Each lesson was focused on one specific social or emotional concept that was taught and practiced across a one week time period. These lessons were implemented to foster the development of appropriate social-emotional skills such as empathy, emotion management, problem solving, self-regulation, and executive function skills.

At Tier 2, identified students with academic needs were provided supplemental, small group instruction in addition to the general curriculum. Students were categorized into groups
according to scores they received on the DIBELS assessment. Specifically, students received additional support and instruction in phonemic awareness, phonics, decoding, fluency, and/or comprehension depending on the individual child’s grade level. Other staff delivered this layer of support in smaller workshops composed of three to seven students to practice and strengthen skills. To address behavioral and social needs within this tier, students received intervention support through self-monitoring, social skills groups, friendship groups, and daily “getting organized” check-ins. At the time of this study, HES was further developing the specifics of this layer in regard to its social and behavioral components.

At Tier 3 students received the most intensive, personalized instruction and support based on identified individual needs. These students demonstrated multiple risk factors in the areas of reading according to DIBELS assessment data. Similar to Tier 2, small group instruction was facilitated for three to six students at a time who required additional support in the areas of phonemic awareness, phonics and decoding as well as fluency and comprehension to help with basic reading skills. Furthermore, this layer had family and staff collaboration to create a personalized plan for the struggling student with frequent progress monitoring.

**Procedures**

HES expressed interest in receiving support from a local university to assist with systematic screening. This study was designed in response to this request. In fall 2012, district leaders attended a MTSS conference where a national leader in CI3T models and behavioral screening practices from a local university presented an overview of six systematic behavioral screening tools including Student Risk Screening Scale (SRSS; Drummond, 1994), SRSS-IE, the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997), the Systematic Screener for Behavior Disorders (SSBD; Walker & Severson, 1992); Early Screening Project (ESP; Walker et al., 1995), Behavior Assessment System for Children, Second Edition, Behavioral and Emotional
Screening System (BASC-2 BESS; Kamphaus & Reynolds, 2007), and Social Skills Improvement System: Performance Screening Guide (SSiS- PSG; Elliott & Gresham, 2007), available for schools to administer as part of regular school practices for more accurate identification of students with or at risk for problematic behavioral patterns. After the conference, the district leadership team immediately met and determined that the SRSS-IE would be the most ideal screening tool to integrate into practice to better support and drive decision making within their new MTSS model given this was a free access screening tool that was very feasible to prepare, complete, and score that addressed both internalizing and externalizing behaviors. This decision led the team to approach the local university expert to ask for technical assistance integrating SRSS-IE into their MTSS model and support administering the tool during the first year of implementation. After securing institutional review board (IRB) and district approval, the three Homestead schools were approached and invited to participate. All schools chose to participate for the integration of the SRSS-IE into their MTSS models to better inform part of the decision making process. Before meeting with all teachers and staff to conduct the screenings, the researchers worked with school administration to prepare the screening measures, gather student and teacher demographic information, and arrange meeting times for the principal investigators (PIs) to meet with the screening teachers. In this study, we focus on screening efforts at HES.

At HES, 37 teachers (see Table 2) administered the SRSS-IE in a 10-15 minute time block during the winter 2012 and spring 2013 assessment schedules. Then, using a database on a secure server, all data were entered. The research team conducted reliability procedures to ensure each teacher’s screener was accurately completed to reconcile any data entry errors prior to analysis.
Measures

**Student Risk Screening Scale – Internalizing and Externalizing.** The SRSS-IE is an adapted version of the SRSS expanded to detect students with internalizing behavior patterns. Collectively, the 12 items of the SRSS-IE contain the originally developed seven items and five new adapted items. The SRSS-E7 externalizing (original 7-items) subscale includes: (a) steal, (b) lie, cheat, sneak, (c) behavior problem, (d) peer rejection, (e) low academic achievement, (f) negative attitude, and (g) aggressive behavior. The SRSS-I5 internalizing (additional 5-items) subscale includes: (a) emotionally flat, (b) shy, withdrawn, (c) sad, depressed, (d) anxious, and (e) lonely (Lane, Menzies, Oakes, Lambert, et al., 2012; Lane, Oakes, Harris, et al., 2012). Each item is rated on a 4-point Likert-type scale: *never* = 0, *occasionally* = 1, *sometimes* = 2, *frequently* = 3. Scores on the SRSS-E7 externalizing subscale are grouped into three risk categories to show students at risk for anti-social behavioral patterns: low risk (0 – 3); moderate (4 - 8); and high risk (9 – 21). The yielded SRSS-I5 total score ranges from 0 to 15, however, cut scores for the internalizing subscale are still under development with anticipated established categories set for 2015 (Oakes, Lane, Cox & Messenger, 2014).

**Office Discipline Referrals.** An ODR tracks the occurrence of problematic student behavioral patterns observed by school staff across school settings. As an indicator of behavioral risk, ODRs have established categories to reflect student risk levels (Sugai, Sprague, Horner, & Walker, 2000) including low risk (0 - 1 ODRs), moderate risk (2 - 5 ODRs), and high risk (6+ ODRs). At HES, students warranted ODRs whenever the school-wide PBIS plan was violated to a major degree based on instances such as fighting, cheating, and/or bullying. The number of ODRs earned during the 2012-2013 academic year was divided by the total number of instructional days each student was enrolled to establish the year-end ODR rate. ODRs were the outcome measure associated with the present study.
Design and Statistical Analysis

This study employed a descriptive design to analyze student performance patterns for an elementary school as a whole according to the SRSS-IE and its subscales scores. Descriptive statistical analysis was used to analyze SRSS-IE score data at HES to (a) explore continuous variables (b) assess risk according to categorical scores, and (c) examine the relationship between the SRSS-IE and its subscales, (SRSS-I5 and SRSS-E7) and rate of office discipline referrals earned over the course of an academic year. The statistics analyzed were computed with Statistical Analysis Software (SAS; Institute, 2004).

Looking at initial levels of risk, SRSS-E7, SRSS-I5, and SRSS-IE12 scores were assessed from the winter 2012 time point. First, means, standard deviations, and ranges were calculated for the SRSS-E7, SRSS-I5, and SRSS-IE12 scores using SAS procedures. Then, the percentage of students scoring in low, moderate, and high risk categories were calculated according to SRSS-E7 scores from winter 2012. The percentage of low risk students was calculated by dividing the total number of students who received a total SRSS-E7 score of 0 to 3 by the total enrollment of students rated by teachers and multiplied by 100 to quantify a percentage in the range of 0-100%. This procedure was repeated to obtain the percentage of students in the moderate (total scores of 4 - 8) and high risk (total scores of 9 - 21) categories.

Next, shift in student risk status was analyzed using multiple descriptive procedures. Test-retest stability was examined by calculating Pearson’s correlation coefficients between time points (17 weeks in duration, respectively) for SRSS-E7, SRSS-I5, and SRSS-IE12 scores. To analyze and understand the degree of relation for correlation coefficients, the following guidelines were followed: .00 to .10 were non-existent, .10 to .30 were small, .30 to .50 were medium, .50 to .70 were large, .70 to .90 were very large, and .90 to 1.00 were close to perfect (Hopkins, 2002). Mean scores were calculated using SAS procedures to examine changes in the
average SRSS-E7, SRSS-I5, and SRSS-IE12 total scores for the entire student body from winter 2012 to spring 2013. Then, the value of Hedges’s $g$ was calculated using the means and standard deviations from the SRSS-E7, SRSS-I5, and SRSS-IE12 scores to determine the effect size. The magnitude of effect size was examined using the guidelines of 0.2 as small effects, 0.5 as medium effects, and 0.8 as large effects (Cohen, 1992).

After exploring the continuous variables, categorical scores and group membership stability were analyzed to assess changes in student risk status over time. First, categorical scores were again calculated to determine the percentage of students scoring in low, moderate, and high risk categories for spring 2013 SRSS-E7 scores. Then, descriptive procedures were implemented to explore the stability change in individual students’ risk status according to the teacher rated SRSS-E7 scores from winter 2012 to spring 2013. SRSS-E7 scores from the two time points were compared to determine if students’ risk status remained stable, improved, or declined. Stable risk referred to students who scored (a) in the low risk category during both time points, (b) in the moderate risk category during both time points, or (c) in the high risk category during both time points. Improved risk status referred to students who scored (a) in the moderate risk category during winter 2012 and in the low risk category for spring 2013, (b) in the high risk category in winter 2012 and in the moderate risk category in spring 2013, or (c) in the high risk category in winter 2012 and in the low risk category in spring risk 2013. Declined risk status referred to students who scored (a) in the low risk category in winter 2012 and in the moderate risk category in spring 2013, (b) in the low risk category in winter 2012 and the high risk category in spring 2013, or (c) in the moderate risk category in winter 2012 and in the high risk category in spring 2013.

Last, Pearson product correlation coefficients were calculated to explore the nature of relation between SRSS-IE (SRSS-E7, SRSS-I5, and SRSS-IE12) scores and ODRs earned over
the course of the school year. To interpret the magnitude of relation for correlation coefficients, the same guidelines were followed that were used for test-retest stability estimates.
Initial Levels of Risk

In winter 2012, the average SRSS-E7 score for the entire student body was 2.31 ($SD = 3.17$, range: 0-17), indicating low overall levels of risk for antisocial behavior (see Table 4). In looking at the newly developed internalizing items, the SRSS-I5 score was even lower, with a mean of 0.85 ($SD = 1.60$, range: 0-12). This suggests the level of internalizing behaviors were quite low compared to the externalizing dimension. However, it is important to recall the total scores for the SRSS-E7 could range from 0 to 21 and total scores for the SRSS-I5 could range from 0 to 15. In terms of the total score, the mean SRSS-IE12 score was 3.31 ($SD = 4.21$, range: 0-24), also suggesting a low level of combined risk.

Findings from winter 2012 SRSS-E7 categorical scores revealed approximately 76.75% ($n = 571$) of the student population scored in the low risk category, 17.47% ($n = 130$) scored in the moderate risk category, and 5.78% ($n = 43$) scored in the high risk category (see Figure 2). SRSS-I5 and SRSS-IE categorical scores were not reported as cut scores are under development to establish these risk categories.

Shift in Student Risk Status

To examine shifts in risk over time, mean scores, effect sizes, and correlation coefficients for the SRSS-E7 (externalizing), SRSS-I5 (internalizing), and SRSS-IE 12 (comorbid) were explored. The calculated intercorrelations for the SRSS-E7, SRSS-I5, and SRSS-IE12 scores were all positively correlated and statistically significant to the $p < .0001$ level. In Table 4, mean scores, effect sizes, and correlation coefficients were reported.
SRSS-E7. First, SRSS-E7 externalizing subscale total scores were examined to analyze the shift in risk over time (17 weeks). In looking at test-retest stability estimates of the SRSS-E7, results reveal a high magnitude relation between total scores ($r = 0.83$) from winter 2012 to spring 2013. This degree of relation between total scores for the SRSS-E7 was the highest in magnitude compared to the inter-correlation results for SRSS-I5 and SRSS-IE12 total scores. In addition, findings revealed the SRSS-E7 total mean scores were 2.31 in winter 2012 to 2.24 in spring 2013. These mean scores revealed a negligible change from winter to spring indicating stable low levels of risk for antisocial behavior patterns. In looking at Hedges’s $g$ to examine the effect size between SRSS-E7 total scores over time, results revealed a low- magnitude of difference (Hedges’s $g = -0.02$). That is, a nonsignificant effective size with negative directionality was revealed due to the negligible decrease between mean SRSS-E7 total scores over time. Collectively, the calculated results for test-retest stability, mean, and effect size indicate these data are highly stable, suggesting changes in student behavioral performance were minimal over time.

In looking at categorical scores from the SRSS-E7 to examine the shift in risk overtime, the percentage of students scoring in the low risk category remained stable between time points with 76.75% ($n = 571$) in winter 2012 to 76.27% ($n = 566$) in spring 2013 (see Figure 2). Similar stable patterns were observed in the other risk categories, where the percentage of students scoring in the moderate risk category between time points was 17.47% ($n = 130$) in winter 2012 to 17.28% ($n = 126$) in spring 2013, and the percentage of students scoring in the high risk category was 5.78% ($n = 43$) in winter 2012 to 6.45% ($n = 47$) in spring 2013. These negligible differences revealed from SRSS-E7 data again suggest observed student behavior was highly stable between time points.
Group membership stability changes for the SRSS-E7 subscale scores revealed 85.39% \((n = 608)\) of the student population remained in the stable category from winter 2012 to spring 2013 (see Table 5): 71.91% \((n = 512)\) of students remained in the low risk category, 9.83% \((n = 70)\) remained in the moderate risk category, and 3.65% \((n = 26)\) remained in the high risk category. Additionally, 6.32% \((n = 26)\) of students improved their level of risk from winter 2012 to spring 2013, with 1.83% \((n = 13)\) of students moving from high to moderate risk, and 4.49% \((n = 32)\) improving from moderate to low risk. There were no students who improved their level of risk moving from the high to low category. Furthermore, 8.29% \((n = 59)\) of the student population showed an increase in their level of risk with 5.90% \((n = 42)\) moving from low to moderate risk, 2.25% \((n = 16)\) moving from moderate to high risk, and 0.14% \((n = 1)\) moving from low to high risk.

In summary, a majority of the student body (85.39%) remained stable in terms of risk status indicated by SRSS-E7 total scores over time. Of the 85.39% who remained stable, 71.91% of the student population remained at low risk, with smaller portions of the sample remaining at moderate (9.83%) and high (3.65%) risk. In terms of lowered levels of risk, 6.32% of students showed this status change with most of those who changed categories moving from moderate to low risk (4.49%). Although this subgroup of students demonstrated a more favorable risk status, there were more students whose risk status increased (8.29%) with most declining from low to moderate risk (5.90%).

**SRSS-I5.** Next, the SRSS-I5 internalizing subscale scores were analyzed from winter 2012 to spring 2013 to further assess changes in levels of risk. In looking at test-retest stability estimates, results revealed a medium level \((r = 0.56)\) of relation from winter 2012 to spring 2013. This inter-correlation revealed the smallest degree of relation compared to the other correlations between SRSS-E7 and SRSS-IE12 scores. Additionally, mean scores for the SRSS-I5 revealed
averages of 0.85 in winter 2012 to 0.98 in spring 2013. These average scores over time (17 weeks) for the SRSS-I5 subscale suggest stable, low levels of risk were observed for internalizing behaviors between time points. The SRSS-I5 internalizing mean scores were much lower compared to the SRSS-E7 externalizing mean scores. In looking at Hedges’s $g$, results revealed a low magnitude effect (Hedges’s $g = 0.07$) with positive directionality between SRSS-I5 total scores over time. Compared to the other effect sizes between total scores, Hedges’s $g$ for SRSS-I5 total scores was the only effect with positive directionality due to the slight increase in mean scores over time. Together, SRSS-I5 test-retest stability, mean, and effect size suggest there were stable low levels of internalizing behaviors observed from winter 2012 to spring 2013.

**SRSS-IE12.** Last, in looking at the SRSS-IE12 combined subscale total scores to evaluate shift in student risk status, a high degree of relation was revealed ($r = 0.77$) from winter 2012 to spring 2013. This magnitude of relation is similar in nature to the SRSS-E7 correlations. In terms of mean, combined subscale total scores for the SRSS-IE12 revealed averages of 3.31 in winter 2012 to 3.22 in spring 2013 (see Table 4). The same respective effect size as the SRSS-E7 was calculated between SRSS-IE12 (Hedges’s $g = -0.02$) scores over time. This result again revealed a nonsignificant effect size with negative directionality based on the negligible mean decrease in scores calculated between SRSS-IE12 scores from winter 2012 to spring 2013.

**Relation Between SRSS-IE Scores and ODR Data**

In analyzing the relationship between the SRSS-IE subscale scores and the year-end ODR rate, small magnitudes of relation were observed between the year-end ODR rate and SRSS-E7 scores from the winter ($r = 0.30$) and spring ($r = 0.20$) time points (see Table 6). Similar findings were observed between the year-end ODR rate and SRSS-IE12 totals from the winter ($r = 0.25$) screening, though a slightly lower degree of correlation was observed at the
spring ($r = 0.15$) time point. In contrast, the magnitude of relations between SRSS-I5 subscale scores to the year-end ODR rate were not statistically significant from winter 2012 ($r = 0.06$) to spring 2013 ($r = -0.00$) time points. This suggests, in the absence of externalizing behaviors, ODRs are not a valid measure of internalizing behavior patterns. Moreover, these results indicate students with internalizing behavior patterns rarely received ODRs over the course of the academic year.

The intercorrelations between the SRSS-E7 and SRSS-IE12 scores to year-end ODR rate from winter 2012 and spring 2013 time points yielded results statistically significant to the $p < .0001$ level, however the correlations between SRSS-I5 scores to the year-end ODR rate were not statistically significant. See Table 6 for all correlation coefficients between SRSS-IE scores to the year-end ODR rate.
CHAPTER V

DISCUSSION

Nationally, school systems are adopting and establishing multi-tiered prevention models, such as the Comprehensive, Integrated, Three-Tiered Models of Prevention (CI3T; Lane, Oakes, et al., 2010) to proactively search and serve the diverse needs of all students. The CI3T model is designed to meet the needs of all students by preventing academic and behavior related problems from occurring while also providing support for students demonstrating an existing need based on non-responsiveness to primary prevention efforts (Kauffman & Brigham, 2009; Lane, Oakes, & Menzies, 2014). Within the CI3T model, academics, behaviors, and social skills are addressed in conjunction affording teachers additional instructional time as less time and stress is devoted to classroom management (Lane, Oakes, et al., 2010).

The CI3T model is especially beneficial for students with or at risk for emotional and behavioral disorders (EBD; Lane, 2007; Lane, Oakes, & Menzies, 2014; Kalberg et al., 2010) due to the multiple needs they possess. Various academic, behavioral, and social characteristics can inhibit these students from successful outcomes within and outside of a school setting. However, implementing systematic screening tools (e.g., Student Risk Screening Scale – Internalizing Externalizing [SRSS-IE], Lane, Oakes, Harris, et al., 2012) within models of prevention provide greater opportunities for children at risk to receive appropriate interventions at the earliest possible juncture reducing the likelihood that academic, behavioral, and/or skills deficits worsen or remain stagnant over time (Mattison et al., 2002; Nelson, Benner, et al., 2004).

The CI3T model empowers general and special education professional learning communities to work collaboratively to support the goal of inclusive programming to the greatest extent possible for students receiving emotional disturbance (ED) special education services (Lane, Oakes, & Menzies, 2014; Wagner et al., 2006).
Given recent prevalence estimates suggesting between 2%-20% of school aged students have EBD (Forness et al., 2012) at some point in their education career and less than 1% of school-aged students across grade levels receive special education services under the label of ED as defined in the Individuals with Disabilities Education Improvement Act (IDEA; 2004), it has become a formidable and necessary task for general education teachers to have the knowledge and skills to meet the challenging needs of students with EBD in a general education classroom. With the majority of students with behavioral challenges being served in the general education classroom it is clear behavioral concerns are not solely a special education problem (Oakes, Lane, Cox, & Messenger, 2014). It is a shared responsibility among school personnel (e.g., general education teachers, special education teachers, school psychologist, administration) to ensure students with and at risk for EBD are identified and supported at the earliest possible juncture due to the disheartening outcomes these individuals face within and outside of a school setting (Lane, Oakes, & Menzies, 2014). Fortunately, the CI3T blended model of prevention provides opportunities for students to be explicitly taught and practice the behavioral, social, and/or academic skills sets that often hinder success in and outside of school. Direct instruction in areas like social skills, conflict-resolution skills, and self-determined behaviors are necessary for students with and at risk for EBD to have successful interpersonal relationships across all aspects of life (e.g., peers, teachers, family, employers; Lane, Oakes, & Menzies, 2014). The collaborative efforts of school personnel to find and serve students can allow for children and youth demonstrating an existing need to receive necessary supports before behavioral, academic, and social problems become less amenable to intervention efforts and more firmly engrained (Lane, Kalberg, & Menzies, 2009). The purpose of searching and serving students is not to place them in special education; it is providing appropriate supports and interventions for these
individuals before “behaviors escalate, affecting their academic growth and social competence” (Lane, 2007).

Integrating systematic screeners into tiered models of support afford all students equal access to needed supports (Lane, Menzies, Oakes, & Kalberg, 2012). By simply administering and deriving scores from systematic behavioral screeners like the SRSS-IE or Systematic Screening for Behavior Disorders (SSBD; Walker & Severson, 1992), the process initiates the identification of students for possible Tier 2 and Tier 3 supports. Scores from behavioral tools help drive the decision-making process when designing and implementing interventions within tiered models of prevention.

Central to successful Tier 2 and Tier 3 supports are research-based interventions. To rename a few, Peer Assisted Learning Strategies (PALS; D. Fuchs et al., 1997), function-based interventions (Umbreit et al., 2007), response cost behavior support plans (Oakes, Mathur, et al., 2010), the Behavior Education Program (BEP; Hawken et al., 2007), and small-groups social skill instruction (Lane, Wehby, et al., 2003) were all successful interventions utilized within multi-tiered models of prevention for identified students in need of additional support due to challenging behavior the child possessed. Moreover, scores from systematic screeners can be analyzed in tandem with other school-related data, like academic screening data to more fully inform intervention efforts as some children pose multiple risk factors. For example, Lane and Menzies (2005) examined the effectiveness of supplemental literacy and social skills interventions for elementary students non-responsive to a universal prevention plan based on elevated levels of risk on the Student Risk Screening Scale (SRSS; Drummond, 1994). Given that academics and behaviors are interrelated (Lane & Wehby, 2002) it is recommended school-site teams continue to analyze these together to afford students the most supportive and individualized intervention possible.
Systematic screening data can also be utilized to monitor students’ risk status over time and overall index of risk. Using the SRSS, previous studies (e.g., Lane, Kalberg, Bruhn, et al., 2008; Lane, Kalberg, et al., 2010; Lane & Menzies, 2002, 2003, 2005) examined student risk status over time and overall indexes of risk within various school levels implementing multi-tiered systems of support. When analyzed with treatment fidelity, examining risk over time illustrates the effectiveness of primary prevention plans. Additionally, levels of risk provide necessary and helpful information when school-site teams are developing targeted supports for students. This study illustrates one rural school’s implementation of the SRSS-IE to explore indices of risk over time, stability change in risk student status, and the relation between this measure to the year-end office discipline referral (ODR) rate. The SRSS-IE was administered during the school’s first year of its revamped, blended model of prevention (multi-tiered system of support [MTSS]) implementation.

Initial Levels of Risk

The first objective of this paper examined the overall levels of risk evident within a rural elementary school according to winter 2012 scores on the SRSS-E7, SRSS-I5, and SRSS-IE12. The results from the SRSS-IE and its subscales suggest the elementary students displayed overall low levels of risk for externalizing, internalizing, and co-morbid behavioral patterns. Reported means were 2.31 for SRSS-E7 scores and 0.85 for SRSS-I5 scores, suggesting the level of internalizing behaviors were quite low compared to externalizing behaviors at the time of the initial screening (winter 2012). Interestingly, a similar, small mean was found in previous research (Lane & Menzies, 2005) for SRSS-E7 onset scores with an average score of 0.77. This mean score is smaller than both SRSS-E7 and SRSS-I5 initial means calculated in this study suggesting an even lower level of risk at the school-site located in Lane and Menzie’s (2005) study.
The SRSS-E7 categorical scores from the initial winter 2012 screening revealed 76.75% of the student body scored in the low risk category (see Figure 2), encouraging given approximately 80% of students are expected to respond positively to universal primary prevention plans (Lane, Oakes, & Menzies, 2014). However, accurate conclusions can not be drawn about whether or not this overall satisfactory low level of risk (~80%) is directly associated with the initial primary prevention program at HES as treatment integrity data were not collected as part of this study. Similar satisfactory initial levels of risk were evident in previous research (e.g., Lane, Kalberg, Bruhn, et al., 2008) with 81.31% of the elementary students from middle Tennessee in the low risk category.

Shift in Student Risk Status

Shifts in levels of risk were explored from winter 2012 to spring 2013. It would be expected to see shifts in risk where the levels decrease over time as that suggests student responsiveness to a multi-tiered prevention model. Observing decreases in the level of risk for students at the elementary level is critical as this is the time when they are most amendable to intervention efforts (Bullis & Walker, 1994).

Test-retest stability with correlation coefficients was evident across the SRSS-IE12 ($r = 0.77$), SRSS-E7 ($r = 0.83$), SRSS-I5 ($r = 0.56$). This finding suggests scores on the SRSS-IE were consistent over time. Additionally, the test-retest stability results are of similar nature to earlier studies exploring reliability of the measure (Lane, Menzies, Oakes, Lambert, et al., 2012; Menzies & Lane, 2010; Oakes, Wilder, et al., 2010) further validating the utility of this measure. This also supports the psychometric strength of the tool by showing the instrument is stable.

Further suggesting high levels of stability within HES from winter 2012 to spring 2013 were the categorical findings from the SRSS-E7 scores. The high percentage of the student population remaining stable in this study is similar to findings in earlier research (Lane &
Menzies, 2002), where 86% of elementary students in one school in southern California remained stable in terms of risk category between screening time points. For the approximated 15% of students who demonstrated a shift in risk level, improvements in behavioral performance accounted for 6.32% of the shift while the other 8.29% showed a decline in their behaviors. Accurate conclusions cannot be drawn from the overall stable state of behavior observed at HES from winter 2012 to spring 2013 as treatment integrity data for the MTSS model were not collected. Without this information only speculation can be made as to why shift in student performance did or did not occur. The question remains whether the stable state of behavioral performance revealed in this study is due to how well teachers and staff implemented the primary prevention plan or if other outside factors are the source of highly stable behavior patterns over time. Ideally at the end of the first year of MTSS or CI3T implementation there would be evidence for lower levels of risk within a school-site. The highly stable environment at HES may indicate the necessary supports, interventions, and prevention efforts are not being provided to meet the diverse needs of all students to facilitate academic, behavioral, and social success. This is especially disheartening for students at moderate or high risk as these children are at a time in their lives most amendable to intervention efforts but may not be receiving appropriate supports to meet their needs. It is critical for students with and at risk for EBD to be identified to receive supports and interventions at the earliest possible juncture in their educational careers to ensure more academic, behavioral, and social successes within and outside of a school setting. These findings truly illustrate the utmost importance of collecting treatment integrity data so the most accurate decisions and conclusions can be made to facilitate appropriate changes in the prevention plan to be implemented for a successful second year of MTSS or CI3T.
 Relation Between SRSS-IE Scores and ODR Data

The last question of this study explored the relationship between SRSS-IE12, SRSS-E7, and SRSS-I5 scores with year-end office discipline referral (ODR) data (see Table 6). The most enlightening results were the correlations between the SRSS-I5 scores and year-end ODR rate. Specifically, these correlations were not statistically significant within relations between year-end ODR rates and SRSS-I5 scores across winter \( (r = 0.06) \) and spring \( (r = -0.00) \) time points. This finding suggests that the SRSS-I5 may measure distinctly different behaviors than ODRs. Moreover, the correlations indicate ODR data are currently not an appropriate method to detect students with internalizing behavioral patterns at HES. Given the nature of externalizing behaviors capturing teacher attention and warranting ODRs, this result is not surprising as internalizing behaviors are less likely to be recognized and often go undetected by school staff (Bradshaw et al., 2008; Walker et al., 2004). These preliminary results are consistent with an earlier study conducted by McIntosh et al. (2009) who reported no significant relation between internalizing behavior problems and office discipline referrals. That is, preliminary findings in this study and results from earlier research (McIntosh et al., 2009) illustrate the importance for schools to not solely rely on ODR data to identify students with internalizing behavior patterns or examine student responsiveness or lack of response to universal and other interventions. Furthermore, relying solely on ODR data eliminate the opportunity for students with internalizing behavior patterns to be afforded access to early intervening services offered to students identified with externalizing behavior patterns at an age when interventions are most effective.

In looking at the relationship between the externalizing SRSS-E7 subscale and combined SRSS-IE12 scores to the rate of year-end ODRs, correlation coefficients were similar in nature to previous research (e.g., Oakes, Wilder, et al., 2010). The significant relation suggests SRSS-E7
and SRSS-IE12 scores are associated with rates of ODRs. That is, students with higher scores of risk on the externalizing subscale of the SRSS-IE (SRSS-E7) are likely to warrant more ODRs. This is not surprising given the nature of externalizing behavior patterns to capture teacher attention.

**Limitations and Future Directions**

Although these results are enlightening and preliminary in nature, they should be interpreted in light of several limitations. Several limitations are presented related to the sample size, time, and treatment integrity.

**Sample Size.** The first limitation of this study addresses the sample size. Only one elementary school in a rural locale within a Midwestern state participated in this study. The generalization of the findings for the relation between SRSS-I5 scores and year-end ODR rate can not be validated until more studies are replicated. Future studies should address a new geographic locale and additional schools to examine the nature of relation between the SRSS-I5 internalizing subscale scores and year-end ODRs to further support the preliminary evidence found in this study and earlier research (McIntosh et al., 2009) where the magnitude of relations were not statistically significant suggest a non-existent relationship between the two.

**Time.** This study’s encouraging results are limited by the time frame of this study. The SRSS-IE scores were only examined across winter and spring time points during the 2012-2013 school year. This hinders the interpretation of the results since behavioral tools are systematic and should be implemented three times (fall, winter, spring) for the most reliable results. A better indication of overall risk and shift in student performance can be provided when analyzing screening data over longer increments of time. With that, future research could replicate this study across an entire year to better examine student performance and provide further validation for the SRSS-IE. Specifically, a future validation could further examine the predictive validity of
the SRSS-E7 in predicting behavioral and academic outcomes for elementary students over the length of a single or multiple school years using the SRSS-IE. This research would expand the previous work conducted by national leaders (Menzies & Lane, 2010; Oakes, Wilder, et al., 2010). Then, as cut scores for the SRSS-I5 are established, additional research is recommended to determine the predictive validity of the entire SRSS-IE measure.

**Treatment Integrity.** The next limitation of this study addresses treatment integrity. This study does not report treatment integrity data examining the magnitude of primary prevention plan implementation between raters from winter 2012 to spring 2013. The absence of treatment integrity data does not allow for accurate conclusions to be drawn as to how student performance is shifting over time according to SRSS-IE data. When desired objectives are not achieved and treatment integrity is not monitored, there is no indication for how or why outcomes came to be. Specifically, conclusions can not be determined as to whether undesirable outcomes are a result of an inadequately designed plan or a well-designed plan that was inadequately implemented (Lane, Oakes, & Magill, 2014). Similarly, when desired outcomes are manifested (e.g., improvements in reading, increased attendance rates, and decreased rates of ODRs) and treatment integrity data are not assessed, conclusions can not be made as to whether the primary prevention plan or other factors are responsible for student responsiveness (Lane, Oakes, & Magill, 2014). With that, as HES continues with SRSS-IE screening to examine student performance over time within their MTSS model, it is recommended that a treatment integrity measurement tool be integrated into their primary prevention plan as part of regular school practices. Treatment integrity measurement tools such as the School-wide Evaluation Tool (SET; Sugai, Lewis-Palmer, Todd, & Horner, 2001) or the Benchmark of Quality (BOQ; Kincaid, Childs, & George, 2005) could be used to examine the Positive Behavior Interventions and Supports (PBIS; Sugai & Horner, 2002) component of their MTSS model to more accurately
conclude whether stable, improved, or declined student performance over time is a result of the primary prevention plan.

Implications

Relevant implications were evident in this study for practitioners related to data-driven decision-making, home-based supports, and concern for internalizing behaviors. First, data collected from spring 2013 can be utilized to inform interventions at school and possible home-based supports implemented over the summer. The school-site leadership team can use the information gleaned from the spring SRSS-IE data along with other school-wide data sources (e.g., ODRs, DIBELS attendance, nurses visits) to decide which individual students were non-responsive to the primary prevention plan and would benefit from Tier 2 or Tier 3 supports. Although this study did not include specifics related to Tier 2 and Tier 3 behavioral supports available at HES, the entry and exit criteria, and progress monitoring information for would be defined in the school’s blue print under Tier 2 and Tier 3 intervention grids. For example, a student who scored at moderate risk on the SRSS-E7 and had needs improvement on their report card could receive a behavior contract support for work completion according to clearly defined Tier 2 intervention entry criteria (Lane, Oakes, Jenkins, Menzies, & Kalberg, 2014).

Additionally, the SRSS-IE data coupled with teacher feedback and treatment integrity could be analyzed to determine areas of the primary prevention plan that could be improved or modified. Since the SRSS-IE data collected from winter 2012 to spring 2013 were highly stable over time, it is possible not all the teachers were confident implementing the primary plan, or implementing the plan incorrectly, or not implementing the plan at all. If teachers were not confident implementing the plan, additional MTSS professional development trainings could be held over the summer to ensure the school’s blue print was clearly understood. However, without treatment
integrity data it cannot be concluded as to where changes should be made in a primary prevention plan.

As parents are one of the key stakeholders apart of a CI3T model of prevention, it is critical for the defined roles and responsibilities they hold be maintained with integrity over the summer to ease the transition into the following school year (Lane, Oakes, & Menzies, 2014). For the said student who received a behavioral contract for work completion, the parents and school-site leadership team could collaborate to modify how the contract could be implemented at home. The contract could be implemented and paired with behavior specific praise throughout the summer so the child has continuous consistency in expectations between home and school easing the transition into the next school year. In addition to a possible Tier 2 support modified for home use, parents could post the school-wide expectations (Be Safe, Be Outstanding, Be Accountable, Be Respectful [S.O.A.R.]) in their home to reinforce positive behavior and again remain consistent with school practices. Ongoing communication and collaboration between parents and a school-site leadership team ensures an MTSS or CI3T plan is being implemented with and that the plan is effectively supporting the achievement and growth of a parent’s child or teacher’s student.

Next, the most important finding of this study revealed no relation between internalizing behavior patterns and ODRs thus indicating ODRs can not be the sole measure teachers and administrators rely on to identify students in need of further behavioral supports. The heavy reliance on ODRs only helps the identification process of externalizing students. If teachers have a systematic behavioral screening tool like the SRSS-IE that is practical and feasible in terms of time and cost, students who demonstrate at risk externalizing, internalizing, or co-morbid behavioral patterns are more likely to be identified and receive intervention services. The earlier children with internalizing behavioral patterns are identified and receive supporting services, the
greater likelihood of more severe or stagnant behavior patterns can be reduced. Without appropriate supports and interventions, a child with internalizing behavior patterns may take externalizing actions as he/she gets older through self-injurious behavior, physical confrontations with peers and adults, or other serious school violence related actions. Teachers, students, and society all benefit when systematic screening tools are utilized as part of regular school practices within multi-tiered systems of support as the likelihood of unintentionally overlooking a child with internalizing behavior patterns would be reduced. It is highly recommended schools consider systematic behavioral screening tools to more accurately identify and intervene with students demonstrating externalizing, internalizing, or comorbid behavioral patterns at the earliest possible juncture in a child’s educational career when they are most amendable to intervention efforts (Walker et al., 2004). As cut scores are established for the SRSS-I5, it is hoped future validation studies will support this measure as an accurate detection tool for students with externalizing, internalizing, or comorbid behavior conditions.

Summary

As schools continue to adopt multi-tiered systems of support, such as the CI3T model, multiple methods of assessments targeting academic and behavioral performance must be utilized in tandem to more accurately identify and intervene with students. This study presents additional preliminary findings to suggest ODRs are inadequate measures to identify students with internalizing behavioral patterns. Furthermore, this paper provides an illustration of how the SRSS-E7 can be implemented in an elementary school as part of a multi-tiered system of support to examine the indices of risk and stability of student risk status over time. Implementing systematic screening tools within tiered models of support as part of regular school practices are an effective way to more accurately detect students with or at risk for EBD and reduce the likelihood of students going unrecognized for intervening services.
References


62


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doi:10.1177/106342660000800205


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<th>% (n)</th>
</tr>
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<td><strong>Gender</strong></td>
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<td></td>
</tr>
<tr>
<td>Male</td>
<td>49.67</td>
<td>(377)</td>
</tr>
<tr>
<td>Female</td>
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<td>(382)</td>
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<td><strong>Ethnicity</strong></td>
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<td></td>
</tr>
<tr>
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<td>Black</td>
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<td>(16)</td>
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<tr>
<td>Hispanic</td>
<td>4.48</td>
<td>(34)</td>
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<tr>
<td>Asian</td>
<td>2.24</td>
<td>(17)</td>
</tr>
<tr>
<td>Native American</td>
<td>1.32</td>
<td>(10)</td>
</tr>
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<td><strong>Grade level</strong></td>
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</tr>
<tr>
<td>Kindergarten</td>
<td>16.56</td>
<td>(126)</td>
</tr>
<tr>
<td>First</td>
<td>17.87</td>
<td>(136)</td>
</tr>
<tr>
<td>Second</td>
<td>16.82</td>
<td>(128)</td>
</tr>
<tr>
<td>Third</td>
<td>15.64</td>
<td>(119)</td>
</tr>
<tr>
<td>Fourth</td>
<td>19.32</td>
<td>(147)</td>
</tr>
<tr>
<td>Fifth</td>
<td>13.80</td>
<td>(105)</td>
</tr>
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<td><strong>Special Education</strong></td>
<td></td>
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</tr>
<tr>
<td>Emotional Disturbance</td>
<td>14.49</td>
<td>(110)</td>
</tr>
<tr>
<td></td>
<td>0.26</td>
<td>(2)</td>
</tr>
<tr>
<td><strong>Age M (SD)</strong></td>
<td>7.82</td>
<td>(1.76)</td>
</tr>
</tbody>
</table>

*Note.* Percentages are based on the number of participants who completed the item.
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<thead>
<tr>
<th>Characteristics</th>
<th>% (n)</th>
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</thead>
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<td><strong>Gender</strong></td>
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<td>16.22 (6)</td>
</tr>
<tr>
<td>Female</td>
<td>83.78 (31)</td>
</tr>
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<td><strong>Ethnicity</strong></td>
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</tr>
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<td>White</td>
<td>97.30 (36)</td>
</tr>
<tr>
<td>Asia</td>
<td>1.28 (1)</td>
</tr>
<tr>
<td>Other</td>
<td>1.28 (1)</td>
</tr>
<tr>
<td><strong>Primary role</strong></td>
<td></td>
</tr>
<tr>
<td>General education</td>
<td>97.30 (36)</td>
</tr>
<tr>
<td>Special education</td>
<td>2.70 (1)</td>
</tr>
<tr>
<td><strong>Certified in the area currently teaching</strong></td>
<td>100.00 (35)</td>
</tr>
<tr>
<td><strong>Highest degree earned</strong></td>
<td></td>
</tr>
<tr>
<td>High school diploma</td>
<td>0</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>59.46 (22)</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>40.54 (15)</td>
</tr>
<tr>
<td><strong>Completed course in classroom management</strong></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>91.89 (34)</td>
</tr>
<tr>
<td>No</td>
<td>8.11 (3)</td>
</tr>
<tr>
<td><strong>Professional development in academic screening</strong></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>61.11 (22)</td>
</tr>
<tr>
<td>No</td>
<td>38.89 (14)</td>
</tr>
<tr>
<td><strong>Professional development in behavior screening</strong></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>44.44 (16)</td>
</tr>
<tr>
<td>No</td>
<td>55.56 (20)</td>
</tr>
<tr>
<td><strong>Years teaching experience M (SD)</strong></td>
<td>9.05 (5.60)</td>
</tr>
<tr>
<td><strong>Years teaching experience current school M (SD)</strong></td>
<td>7.17 (4.19)</td>
</tr>
<tr>
<td><strong>Age M (SD)</strong></td>
<td>33.81 (7.84)</td>
</tr>
</tbody>
</table>

*Note.* Percentages are based on the number of participants who completed the item.
### Table 3

**School Demographic Information 2012-2013**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Homestead Elementary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance Rate</td>
<td>96.10%</td>
</tr>
<tr>
<td>Economically Disadvantaged</td>
<td>38.41 (300)</td>
</tr>
<tr>
<td>Enrollment</td>
<td>(781)</td>
</tr>
<tr>
<td>Free or Reduced-price lunch eligible</td>
<td>36.05 (274)</td>
</tr>
<tr>
<td>Grades Served</td>
<td>PK-5</td>
</tr>
<tr>
<td>Locale code</td>
<td>Rural: Fringe</td>
</tr>
<tr>
<td>NCLB Status</td>
<td>Did not make AYP</td>
</tr>
<tr>
<td>Title 1 Eligible</td>
<td>Yes</td>
</tr>
<tr>
<td>Student/Teacher Ratio</td>
<td>10.34</td>
</tr>
</tbody>
</table>

*Note. NCLB = No Child Left Behind Act (1997); AYP = adequate yearly progress; PK = Prekindergarten.  
  aKansas Department of Education School Report Cards 2012-2013  
  bNational Center for Education Statistics, Common Core Data 2011-2012*
Table 4

Means, Standard Deviations, Intercorrelations, and Effect Sizes

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Winter 2012</th>
<th>Spring 2013</th>
<th>r</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
<td>Hedges’s g</td>
</tr>
<tr>
<td>1. SRSS-E7</td>
<td>2.31 (3.17)</td>
<td>2.24 (3.02)</td>
<td>0.83*</td>
<td>-0.02</td>
</tr>
<tr>
<td>2. SRSS-I5</td>
<td>0.85 (1.60)</td>
<td>0.98 (1.96)</td>
<td>0.56*</td>
<td>0.07</td>
</tr>
<tr>
<td>3. SRSS-IE12</td>
<td>3.31 (4.21)</td>
<td>3.22 (4.09)</td>
<td>0.77*</td>
<td>-0.02</td>
</tr>
</tbody>
</table>

Note. SRSS = Student Risk Screening Scale (Drummond, 1994); SRSS-E7 = externalizing subscale; SRSS-I5 = internalizing subscale; SRSS-IE12 = combined scales; SRSS-IE = Student Risk Screening Scale Internalizing and Externalizing (SRSS-IE; Lane, Oakes, Harris, et al., 2012). *p < 0.001.
Table 5

*Stability of Student Risk Status from Winter 2012 to Spring 2013*

<table>
<thead>
<tr>
<th>Behavioral Change</th>
<th>Change Status</th>
<th>% (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable</td>
<td></td>
<td>85.39 (608)</td>
</tr>
<tr>
<td></td>
<td>Low to Low</td>
<td>71.91 (512)</td>
</tr>
<tr>
<td></td>
<td>Moderate to Moderate</td>
<td>9.83 (70)</td>
</tr>
<tr>
<td></td>
<td>High to High</td>
<td>3.65 (26)</td>
</tr>
<tr>
<td>Improved</td>
<td></td>
<td>6.32 (45)</td>
</tr>
<tr>
<td></td>
<td>High to Moderate</td>
<td>1.83 (13)</td>
</tr>
<tr>
<td></td>
<td>High to Low</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Moderate to Low</td>
<td>4.49 (32)</td>
</tr>
<tr>
<td>Declined</td>
<td></td>
<td>8.29 (59)</td>
</tr>
<tr>
<td></td>
<td>Low to Moderate</td>
<td>5.90 (42)</td>
</tr>
<tr>
<td></td>
<td>Low to High</td>
<td>0.14 (1)</td>
</tr>
<tr>
<td></td>
<td>Moderate to High</td>
<td>2.25 (16)</td>
</tr>
</tbody>
</table>
Table 6

*Correlation Coefficients Between SRSS-IE to Year-End Office Discipline Referrals*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Year End ODR rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRSS-E7_W</td>
<td>0.30*</td>
</tr>
<tr>
<td>SRSS-E7_S</td>
<td>0.20*</td>
</tr>
<tr>
<td>SRSS-I5_W</td>
<td>0.06</td>
</tr>
<tr>
<td>SRSS-I5_S</td>
<td>-0.00</td>
</tr>
<tr>
<td>SRSS-IE12_W</td>
<td>0.25*</td>
</tr>
<tr>
<td>SRSS-IE12_S</td>
<td>0.15*</td>
</tr>
</tbody>
</table>

*Note. SRSS-IE = Student Risk Screen Scale Internalizing and Externalizing (SRSS-IE; Lane, Oakes, Harris, et al., 2012); ODR = office discipline referral; SRSS = Student Risk Screening Scale (Drummond, 1994); SRSS-E7 = externalizing subscale; W = winter time point; S = spring time point; SRSS-I5 = internalizing subscale; SRSS-IE12 = combined scales. *

*p < 0.001.*
<table>
<thead>
<tr>
<th>School Expectations</th>
<th>Classroom</th>
<th>Library, Gym &amp; Auditorium</th>
<th>Restrooms</th>
<th>Commons / Lunchroom</th>
<th>Hallways</th>
<th>Activities / Transportation</th>
<th>Playground</th>
<th>Indoor Recess</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Be…</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Safe</strong></td>
<td><em>Keep hands, feet and other objects to yourself</em></td>
<td><em>Follow classroom expectations</em></td>
<td><em>Use tools, equipment, and instruments properly</em></td>
<td><em>Keep hands, feet and other objects to yourself</em></td>
<td><em>Stay seated</em></td>
<td><em>Wash and dry hands</em></td>
<td><em>be sanitary</em></td>
<td><em>maintain good hygiene</em></td>
</tr>
<tr>
<td><strong>Outstanding</strong></td>
<td><em>Do your personal best</em></td>
<td><em>Be helpful</em></td>
<td><em>Greet each other with a smile and friendly attitude</em></td>
<td><em>Be quick and silent</em></td>
<td><em>Be a good citizen, clean up after yourself and others</em></td>
<td><em>Greet lunchroom staff with a smile, a please, and a thank you</em></td>
<td><em>Be a good neighbor to everyone who sits around you</em></td>
<td><em>Smile at others as you pass by</em></td>
</tr>
<tr>
<td>School Expectations</td>
<td>Classroom</td>
<td>Library, Gym &amp; Auditorium</td>
<td>Restrooms</td>
<td>Commons / Lunchroom</td>
<td>Hallways</td>
<td>Activities/ Transportation</td>
<td>Playground</td>
<td>Indoor Recess</td>
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<tr>
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<td>-----------</td>
<td>--------------------------</td>
<td>-----------</td>
<td>---------------------</td>
<td>---------</td>
<td>-----------------------------</td>
<td>------------</td>
<td>--------------</td>
</tr>
</tbody>
</table>
| Be… Accountable     | *Complete homework on time  
*Be responsible with all materials  
(Technology, books, tools, equipment, etc.) | *Take ownership of your own mistakes  
*Keep areas clean  
*Bring appropriate materials only  
*Honor school rules in all settings | *Keep the bathroom clean  
*Return to class promptly | *Eat first, Talk second  
*Return your tray and silverware  
*Clean up your trash | *Keep hallway clean | *Keep it fair  
*Be involved | *Line up quickly  
*Put away all equipment in the proper place and in a friendly manner | *Clean up quickly  
*Line up quietly |
| Be… Respectful     | *Follow directions  
*Treat others as you would like to be treated | *Use patience and good manners  
*Remain quiet and attentive throughout presentations  
*Hold doors open for peers  
*Use kind hands and care with personal and/or other’s property | *Wait your turn  
*Use good manners | *Use good manners  
*Use patience while waiting in line  
*Follow lunchroom supervisor’s directions  
*Leave areas better than you found them | *Be patient while in line  
*Be respectful of classrooms with open doors | *Thank your bus driver  
*Be kind | *Take care of all equipment  
*Stop, listen, and follow direction when the whistle blows  
*Respect other’s personal space  
*Voices off when coming into the building | *Take care of games and toys  
*Respect other’s personal space  
*Keep voices quiet |

*Figure 1. Safe, Outstanding, Accountable, and Respectful (S.O.A.R) Expectations Matrix.*
Figure 2. Student risk status according to the SRSS-E7 (original seven items; Drummond, 1994).