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EDITOR'S INTRODUCTION

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The California School Psychologist Supports School Psychologists in Meeting the Mental Health Needs of Children and Youth

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This is the first of two volumes of *Contemporary School Psychology* that will devote special sections to the key role school psychologists play in meeting the social and emotional needs of children and youth. In the past year, broad legislative changes have compelled many school districts in California to reexamine how they will deliver mental health services. Partnerships between County Departments of Mental Health and Local Education Agencies have shifted such that schools are fully assuming the legal and ethical responsibilities to provide counseling, case management, and parent education.

Challenges in the provision of comprehensive mental health service delivery are far from state-specific, however. Several well-designed epidemiological studies have found that over the course of a calendar year; about 20% of children suffer from a diagnosable mental health disorder (e.g., Burns, Costello, Angold, Tweed, et al., 1995; Costello, et al. 1989; Shaffer et al. 1996). While these data have flaws (Center for Mental Health in Schools at UCLA, 2005) and these risks are not evenly distributed across communities, even a conservative interpretation suggests that there are large unmet needs in any school across the nation. These needs invite us, as change agents, to critically examine current practices and consider alternative perspectives in supporting the social and emotional well-being of our students.

The notion that systematic change invites both risk and opportunity is perhaps cliché but still fitting, as the transition away from clinic or community-based services toward school-based service delivery becomes more widespread. Many school districts believe they lack sufficient systems to coordinate these services and many school psychologists contend they do not feel adequately prepared to step into the role of mental health service provider. Perhaps the most significant risk in this transition is that children's needs will go unmet, leading to an even greater social and financial cost to families, schools, and society.

Yet, we offer the interpretation this transition is also ripe with opportunity. As Adelman and Taylor point out in their introduction to the special section, schools provide an excellent point of access for students and families who may benefit from mental health services. Given this, one positive outcome is that more children will receive the services they need to be successful in school. Additionally, school psychologists are embedded in children's broader educational ecosystem. Their familiarity with children's educational needs, the services they receive to meet those needs and the people who work with those children provide a fundamental advantage in providing more integrated and responsive services.

The California Association of School Psychologists (CASP) has argued that school psychologists have the training, expertise and legal authority to deliver these services (Beam, Brady, & Sopp, 2011). We would add to this argument that the broad training of school psychologists in consultation, behavioral interventions, and academic interventions, in addition to individual and group counseling, makes them uniquely qualified to provide mental health services in the schools. This issue of CSP demonstrates those unique qualifications and the breath of services provided by school psychologists.

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The special section on *School Psychologists Meeting the Mental Health Needs of Children and Youth* begins with a commentary by Howard Adelman and Linda Taylor from the Center for Mental Health in Schools. They argue convincingly that in addition to effective approaches to dealing with specific problems, mental health and psychosocial concerns need to be included in a comprehensive approach to school improvement. The special section also contains articles focusing on a wide range of issues related to mental health, including promoting positive discipline, social emotional learning, intrinsic motivation, collaborating with Latino families, and the identification of students with emotional disturbance. In this volume of CSP, we continue with the new features introduced in the first issue of Contemporary School Psychology: *Tools for Practice* and a long form *Book Review*. Dr. Heath's examination of no-suicide contracts in the *Tools for Practice* section provides an excellent review of the strengths and weaknesses of this commonly use strategy. Courtney Matz's comprehensive review of Adelman and Taylor's book, *Mental Health in Schools: Engaging Learners, Preventing Problems, and Improving Schools* (2010) introduces readers to the authors' seminal thinking about how to conceptualize student support services and integrate them into the fabric of school improvement.

This issue also has three excellent general articles, which focus uniquely on the role of school psychologists in the promotion academic competency. These 12 contributions together provide readers with a comprehensive view of our field and innovative prescriptions for practice. We share in the passion of our authors and their support of the opportunity inherent in proactively approaching change.

In addition to our contributing authors, we would like to express sincere gratitude to Associate Editors Kelly Kennedy and Brian Leung for their work in making CSP a quality journal with both state and national impact. We also appreciate the ongoing support of the CASP Board and Executive Director Suzanne Fisher. We too would like to thank Heidi Holmblad for her tireless, unfailing commitment to producing CSP and helping so significantly to create something of lasting impact for all of our readers.

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SPECIAL TOPIC SECTION

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OPINION

Mental Health in Schools: Moving in New Directions

By Howard S. Adelman, PhD, & Linda Taylor, PhD
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It has long been acknowledged that a variety of psychosocial and health problems affect learning and performance in profound ways. And school policy makers have a lengthy history of trying to assist teachers in dealing with problems that interfere with schooling. Prominent examples are seen in the range of psychological, counseling, and social service programs schools provide (Adelman & Taylor 2010). Adding to the work done by student support personnel is whatever the community can offer to collocate and/or link to schools.

While many societal considerations are involved, for the most part the rationale for strengthening mental health in schools has stressed one or both of the following points:

- schools provide good access to students (and their families) who require mental health services;
- schools need to address psychosocial and mental and physical health concerns to enable effective school performance and student well being.

Point one typically reflects the perspective and agenda of mental health advocates and agencies whose mission is to improve mental health services. The second point reflects the perspective and agenda of student support professionals and some leaders for school improvement and also provides a supportive rationale for those wanting schools to play a greater role related to addressing young people's health concerns (Adelman & Taylor, 2006a, b). Implied in both agenda is the hope of enhancing the nature and scope of mental health interventions to fill gaps, enhance effectiveness, address problems early, reduce stigma, and fully imbue clinical and service efforts with public health, general education, and equity orientations. This issue of *Contemporary School Psychology* with its emphasis on promising approaches to wellness, social skills, and life competencies mainly reflects the second agenda.

The problem with both rationales is that, when proposals emphasize another specific approach, another initiative, another team, and so forth, the fragmentation of efforts to focus on the "total child" at a school and throughout a district tends to increase. And, when fragmentation is exacerbated, efforts to embed mental health and psychosocial concerns are further marginalized in school improvement policy and practice.

How Mental Health And Psychosocial Concerns Are Marginalized In Current School Improvement Policly And Practice

Prevailing policy and plans for turning around, transforming, and continuously improving schools are primarily shaped by a two-component framework which marginalizes efforts related to providing additional supports and attention where needed (Adelman & Taylor, 1998). This is graphically presented in Exhibit 1. As illustrated, the main thrust is on improving (1) instruction and (2) how schools manage resources, with the many student and learning support programs and services operated as supplementary add-ons.

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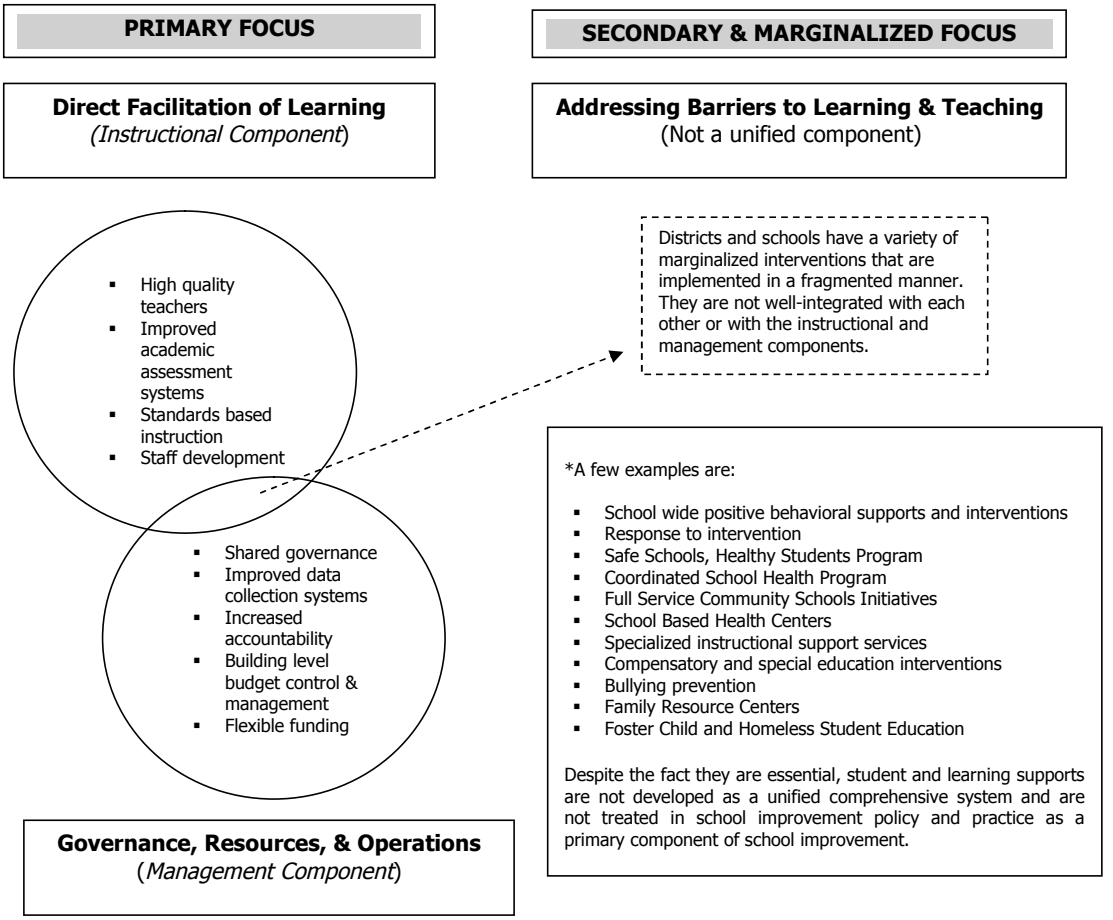
Exhibit 1. *Prevailing two-component framework shaping school improvement policy.*



Obviously, effective instruction is fundamental to a school's mission; no one wants to send children to a school where teachers lack high standards, expectations, and competence; and sound governance and management of resources are essential. What is equally obvious is that teachers need and want considerable help in addressing barriers to student and school success.

Unfortunately, many overlapping factors interfere with learning and teaching. Teachers in low performing schools point to how few students appear motivationally ready and able to learn what the daily lesson plan prescribes. Teachers in the upper grades report that a significant percentage of students are actively disengaged and alienated from classroom learning. And, acting out behavior, especially bullying and disrespect for others, is rampant. (So is passivity, but this attracts less attention.) One result of all this is seen in the increasing number of students misdiagnosed as having learning disabilities (LD) and attention deficit hyperactivity disorders (ADHD). Another result is too many dropouts and pushouts.

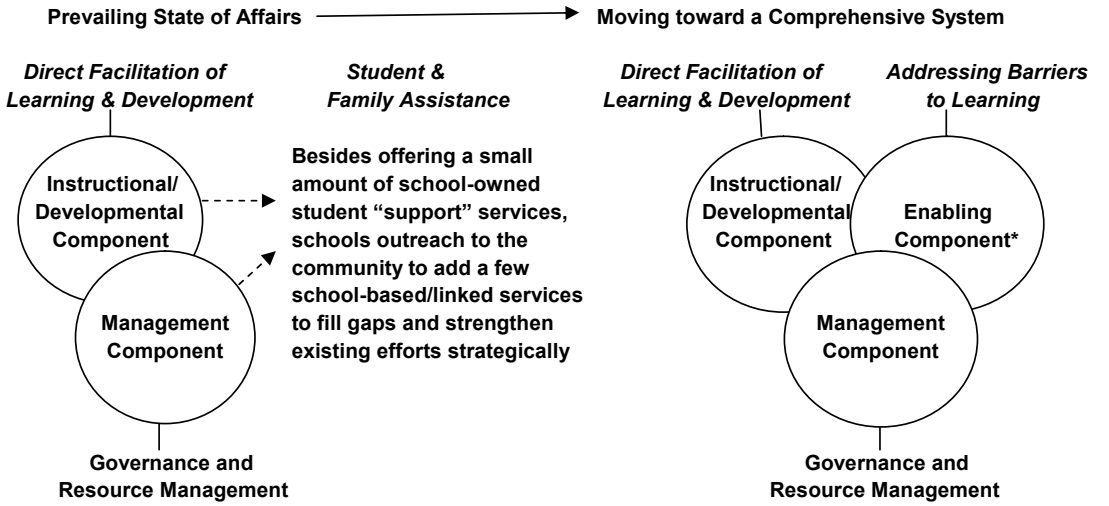
The help teachers currently receive is poorly conceived and designed in ways that meet the needs of relatively few students. This inadequate response to their needs is the product of two-component thinking. The reality is that the many interventions designed to provide student and learning supports are introduced through ad hoc and piecemeal policy and operate in a fragmented manner. This often has resulted in a counterproductive competition for resources as staff representing different interests

push separate, narrow agenda for student and learning supports. And the competition contributes to the continuing marginalization and resultant fragmentation of such endeavors. Efforts to improve the situation have overemphasized yet another approach, better coordination, and other forms of tinkering, rather than pursuing fundamental transformation by moving toward a *unified* and *comprehensive system* for *enabling* all students to learn and all teachers to facilitate development of the whole child.

Moving To A Three Component Framework For School Improvement

Exhibit 2 illustrates the notion that policy for improving schools needs to shift from a two- to a three-component framework. The third component becomes the unifying concept and umbrella under which all resources currently expended for student and learning supports are woven together to develop a cohesive, comprehensive, and multifaceted system. As with the other two components, this component must be treated in policy and practice as *primary and essential* in order to combat marginalization and fragmentation of the work. Furthermore, to be effective in classrooms and schoolwide, it must be fully integrated into school improvement.

Exhibit 2. *Moving to a three-component policy framework for school improvement.*



***The Enabling Component is designed to enable learning by (1) addressing factors that interfere with learning, development, and teaching and (2) re-engaging students in classroom instruction. The component is established in policy and practice as *primary and essential* and is developed into a unified, comprehensive system by weaving together school and community resources. Some venues where this comprehensive approach is adopted refer to the third component as a Learning Supports Component**

The move to a three-component framework is meant to be a fundamental paradigm shift. The intent is to ensure that schools are well-positioned both to (1) enable students to get around barriers to learning and (2) re-engage them in classroom instruction. The emphasis on re-engagement recognizes that efforts to address interfering factors, provide positive behavior support, and prevent disengagement and dropouts must include a focus on re-engaging students in classroom instruction, or they are unlikely to be effective over the long-run (Adelman and Taylor, 2006a,b, 2008). Furthermore, as we will outline, the overlapping nature of the three-component framework provides major opportunities for student support staff to play a significant role in enhancing classroom and schoolwide programs in ways that promote student, family, and community healthy development, well-being, and engagement with schools.

Embedding Mental Health Into School Improvement Policy And Practice

For many years, our Center's policy analyses have stressed that agenda for mental health in schools and all other narrow student and learning support endeavors need to be brought together under a unifying concept (e.g., see Adelman & Taylor, 2006a,b, 2010; Center for Mental Health in Schools & NASP, 2010). The three-component framework designates that concept as *addressing barriers to learning and teaching*. The concept provides a beneficial umbrella under which to embed and cohesively pursue a wide range of mental health and psychosocial interventions.

Unifying student and learning supports into a third component will empower efforts to counter the continuing marginalization of student and learning supports and provide leverage for full integration into school improvement policy and practice. This position has now been adopted by the National Association of School Psychologists (NASP), and 29 national and state organizations have signed on to the policy recommendation that NASP and our Center have prepared (Center for Mental Health in Schools & NASP, 2010). And several state education agencies and a growing number of districts are pioneering designs that embed and weave together the various supports to better address barriers to learning and teaching and re-engage disconnected students (e.g., see *Where's it Happening?* online at http://smhp.psych.ucla.edu/summit2002/nind7.htm).

In our work, we refer to the third component as an *Enabling Component* (i.e., a component to enable learning by addressing the barriers). As the third component has been adopted by trailblazing state education agencies and districts, it often is designated as their *Learning Supports Component.*

In operationalizing the third component, we emphasize both (1) a *continuum* and (2) a set of content arenas. The resulting framework guides development of a unified, comprehensive, and multifaceted system that plays out cohesively in classrooms and schoolwide.

The Continuum

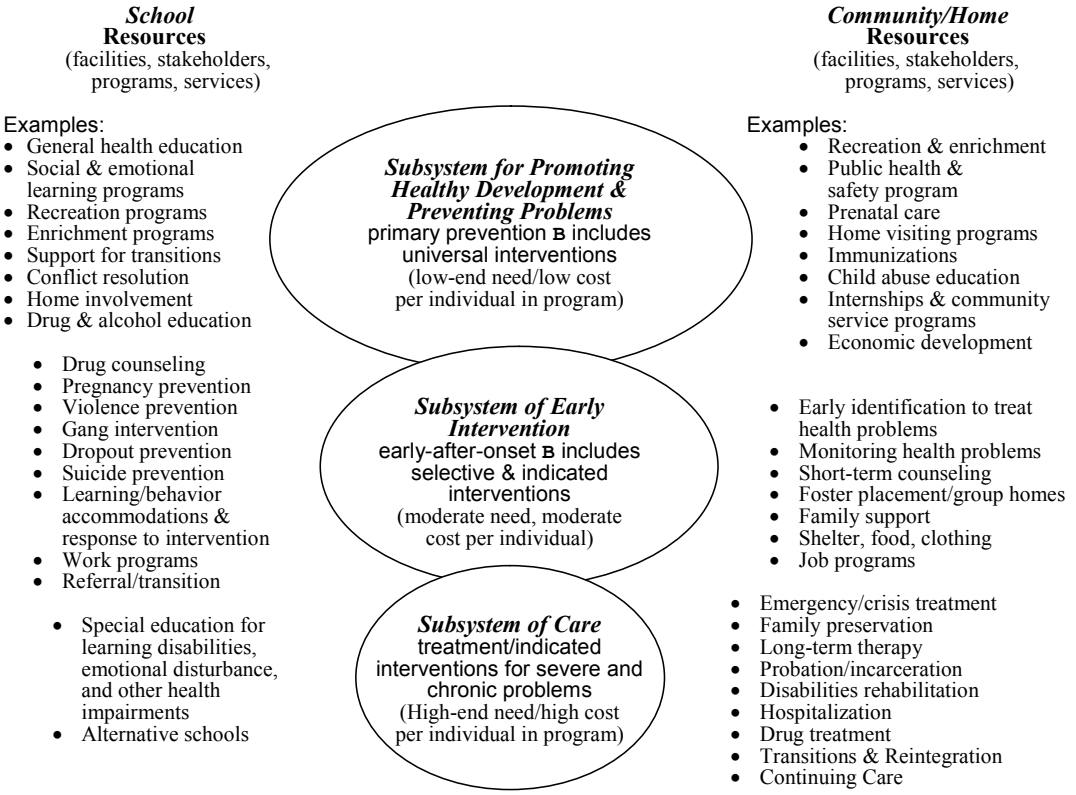
The continuum is conceived as integrated subsystems for

- promoting healthy development and preventing problems
- intervening early to address problems as soon after onset as is feasible
- assisting those with chronic and severe problems.

The continuum encompasses approaches for enabling academic, social, emotional, and physical development and addressing learning, behavior, and emotional problems and does so in ways that yield safe and caring schools. As illustrated in Exhibit 3, the intent is to weave together school resources and strategically braid in a wide range of available community resources in order to meet the needs of many (not just the few) students and significantly reduce the number requiring individual assistance.

Note that the continuum in Exhibit 3 differs in many ways from the widely referenced three-tier intervention pyramid introduced into federal policy related to response to intervention (RTI) and positive behavior intervention and supports (PBIS). As usually presented, the pyramid mainly highlights three levels or tiers of intervention in terms of intensity and suggests the percent of students at each level. While the focus on levels has made a positive contribution, the pyramid is a one dimensional intervention framework. Its continuing overemphasis is limiting development of the type of unified and multifaceted intervention framework that policy and practice analyses indicate are needed to guide schools in developing a comprehensive system of student and learning supports.

Exhibit 3. *Connecting systems to provide an integrated continuum of school-community interventions.*



Notes: Systematic school-community-home collaboration is essential to establish cohesive, seamless intervention on a daily basis and overtime within and among each subsystem. Such collaboration involves horizontal and vertical restructuring of programs and services.

Various venues, concepts, and initiatives permeate this continuum of intervention *systems*. For example, venues such as day care and preschools, concepts such as social and emotional learning and development, and initiatives such as positive behavior support, response to intervention, and coordinated school health. Also, a considerable variety of staff are involved. Finally, *note that this illustration of an essential continuum of intervention systems differs in significant ways from the three-tier pyramid that is widely referred to in discussing universal, selective, and indicated interventions*.

The Content Arenas

Operationalizing the continuum calls for organizing programs and services coherently at every level. To enhance efforts across the continuum, programs and services are coalesced into a multifaceted and cohesive set of content arenas (Adelman & Taylor,2006b). Doing this transforms a laundry list of initiatives into a set of defined, organized, and fundamentally essential intervention domains. Our prototype defines six content arenas as follows:

(1) *Enabling classroom effectiveness* – the focus is on how the teacher and support staff enhance student engagement and address students who are having difficulty with tasks. Specific emphasis is given to

- interventions to enhance engagement and minimize reducing engagement
- interventions to re engage disconnected students
- modifying instruction to fit those who are having difficulty
- bringing support staff and volunteers into the classroom to work with the teacher to address engagement and instructional fit concerns

(2) *Transition supports* – the focus is on supports for the many transitions that occur daily and throughout the school year. For example, starting a new school is a critical transition period; so is changing schools. New personnel also need supports. In addressing newcomer transitions, for instance, schools need to

- have a well designed and implemented welcoming program and mechanisms for ongoing social support
- build capacity (especially staff development) so that teachers, support staff, and other stakeholders can learn how to establish (a) welcoming procedures, (b) social support networks, and (c) proactive transition supports for family members, new staff, and any other newcomers
- provide training and resources to the office staff so they can create a welcoming and supportive atmosphere to everyone who enters the school

(3) *Crisis prevention and response* – the focus is on identifying what can be prevented and taking effective action, establishing appropriate schoolwide prevention strategies, and developing and implementing a well designed system for crisis response and follow up. From a psychological perspective, basic concerns are the degree to which experiences related to school

- enhance or threaten students' feelings of safety
- minimize threats to and maximize students' feelings of competence, self determination, and connectedness with significant others (e.g., relationships between staff and students and among students)
- minimize overreliance on extrinsic reinforcers to enforce rules and control behavior with a view to reducing psychological reactance

(4) *Home involvement/engagement* – the focus is on home, rather than parent, to account for the variety of caretakers who schools may need to consider (including grandparents, siblings, foster caretakers). While the value of home support for student schooling is well established, variations in caretaker motivation and ability to participate at school require a continuum of supports and outreach to any who are not able or motivated to positively support a child's success at school. Examples include interventions to

- address specific support and learning needs of the family
- enhance personalized communications with the home
- outreach positively to caretakers who have not shown the motivation and/or ability to connect with the school
- involve all families in student decision making
- provide effective programs to enhance home support for learning and development

(5) *Community outreach for involvement/engagement* – the focus is on recruiting and collaborating with a wide range of community resources (e.g., public and private agencies, colleges, local residents, artists and cultural institutions, businesses, service and volunteer organizations). Special attention is given to

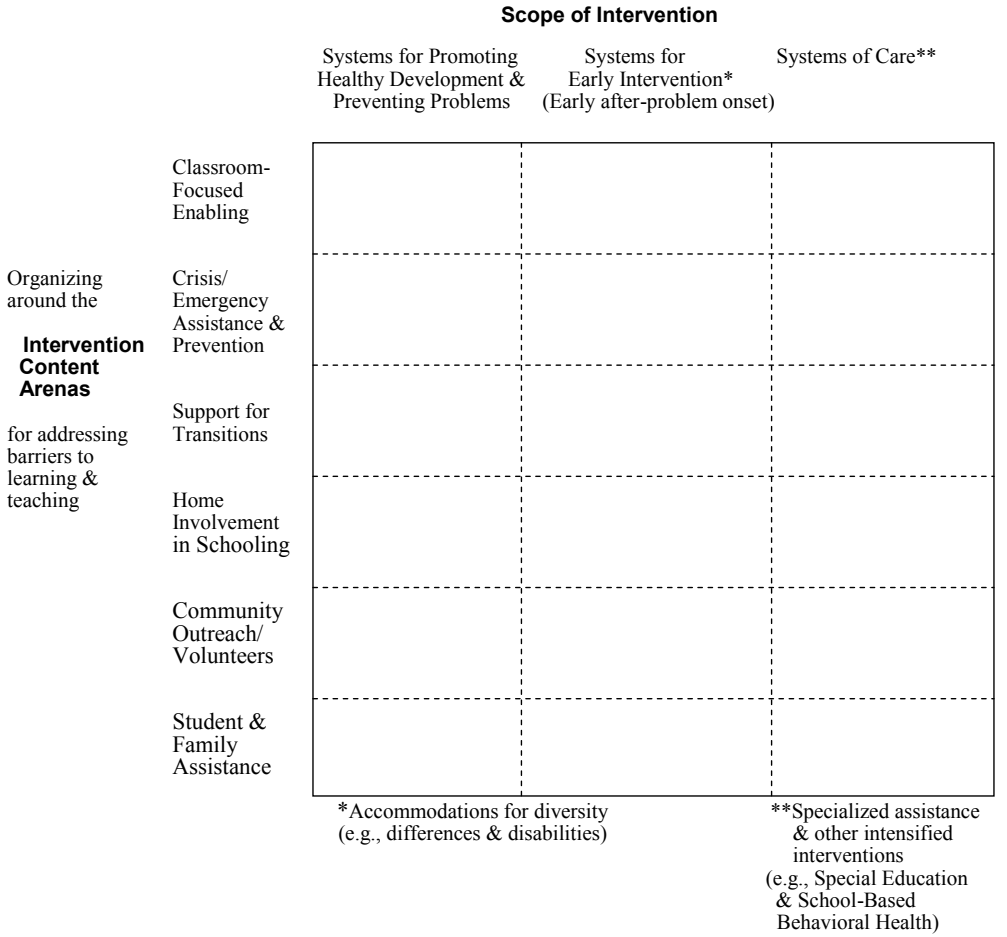
- establishing mechanisms for outreach and collaboration
- building capacity for integrating volunteers into the school
- weaving together school and community resources

(6) *Specialized assistance for a student and family* – the focus is on ensuring special needs are addressed appropriately and effectively. Special attention is given to ensuring there are systemic and effective processes for

- referral and triage
- providing extra support as soon as a need is recognized and in the best manner
- monitoring and managing special assistance
- evaluating outcomes

As already noted, the *continuum* and *six content arenas* constitute an intervention framework for a comprehensive system of learning supports. In Exhibit 4, it is presented as a matrix. Such a framework can guide and unify school improvement planning for developing the system. The matrix provides a tool for mapping what is in place and analyzing gaps with respect to high priority needs. Overtime, this type of mapping and analyses can be done at the school level, for a family of schools (e.g., a feeder pattern), at the district level, community-wide, and at regional, state, and national levels.

Exhibit 4. *Matrix outlining scope and content of a unified, comprehensive, and systematic component for addressing barriers to learning and teaching and re-engaging disconnected students.*



Note: General initiatives and specific school-wide and classroom-based programs and services can be embedded into the matrix. Think about those related to positive behavioral supports, programs for safe and drug-free schools, full-service community schools and Family Resource Centers, special project initiatives such as the *School-Based Health Care* movement, projects such as *Safe Schools/Healthy Students* and the *Coordinated School Health Program*, efforts to address bilingual, cultural, and other diversity concerns, compensatory and special education programs, and mandates stemming from the No Child Left Behind Act.

About Response To Intervention In The Context Of A Comprehensive System Of Learning Supports

As noted above, *Response to Intervention* (RtI) also stresses a continuum of levels of intervention. However, the three tiers it uses primarily emphasize differences in intensity of instruction (Center for Mental Health in Schools, 2011). RtI needs to be part of a more comprehensive system designed to reduce learning, behavior, and emotional problems, promote social/emotional development, and effectively re-engage students in classroom learning (Fredricks, Blumenfeld, & Paris, 2004).

Properly conceived and implemented, RtI is expected to improve the learning opportunities of many students and reduce the number *inappropriately* diagnosed with learning disabilities and behavioral disorders. The approach overlaps some ideas about "pre-referral" interventions but is intended to be more systematically implemented. The aim also is to improve assessment for determining whether more intensive and perhaps specialized assistance and diagnosis are required (Brown-Chidsey & Steege, 2010).

Viewed broadly, response to intervention calls for designing changes in the classroom that improve the student's learning and behavior as soon as problems are noted and using the student's response to such modifications as info for making further changes if needed. The process continues until it is evident that it cannot be resolved through classroom changes alone. Through this sequential approach, students who have not responded well enough to regular classroom interventions receive additional supportive assistance designed to help them remain in the regular program; and only when all this is found insufficient is a referral made for special education assessment. (If the problem proves to be severe and disruptive, an alternative setting may be necessary on a temporary basis to provide more intensive and specialized assessments and assistance.)

Basic to making the strategy effective is truly personalized instruction and appropriate special assistance that can be used as necessary. Think in terms of a two step process. Step 1 involves *personalizing instruction*. The intent is to ensure a student *perceives* instructional processes, content, and outcomes as a good match with his or her interests and capabilities. The first emphasis is on *motivation*. Thus: Step 1a stresses use of intrinsic motivation-oriented strategies to re-engage the student in classroom instruction. This step draws on the broad science-base related to human motivation, with special attention paid to research on intrinsic motivation and psychological reactance (Deci & Moller, 2005; National Research Council and the Institute of Medicine, 2004). The aim is to enhance student perceptions of significant options and involvement in decision making. The next concern is *developmental capabilities*. Thus: Step 1b stresses use of teaching strategies that account for current knowledge and skills. In this respect, individual tutoring and mentoring can be useful if the student perceives these as a good fit for learning. Then, if necessary, the focus expands to encompass Step 2 – *special assistance*. The emphasis is on special strategies to address any major barriers to learning and teaching. And the process stresses the intervention principle of using the least specialized interventions necessary for addressing needs. There, of course, will be students for whom all this is insufficient. In such cases, some other forms of supportive assistance must be added to the mix – inside and, as necessary, outside the classroom. Referral for special education assessment only comes after all this is found inadequate (Adelman & Taylor 2006b).

A core difficulty in using response to intervention strategically involves mobilizing unmotivated students (and particularly those who have become actively disengaged from classroom instruction). If motivational considerations are not effectively addressed, there is no way to validly assess whether a student has a true disability or disorder. If response to intervention is treated simply as a matter of providing more and better instruction, it is unlikely to be effective for a great many students. However, if the strategies are understood broadly and as part and parcel of a comprehensive system of classroom and schoolwide learning supports, schools will be in a position not only to address problems effectively early after their onset, but will build teacher capacity so that similar problems are prevented in the future. We stress that instruction must be supported by schoolwide interventions (e.g., related to providing supports for transitions, responding to and preventing crises, enhancing connections with the home, and more).

Implied in all this is that someone is working to ensure (1) classroom teachers have or are learning how to implement "well-designed early intervention" in the classroom, and (2) support staff are learning how to play a role, sometimes directly and broadly focused in the classroom, to expand intervention strategies if needed. Understood as part of a unified and comprehensive system of learning supports, RtI can play a significant role not only in reducing the numbers who are inappropriately referred for special education or specialized services, it can help enhance attendance, reduce misbehavior, close the achievement gap, and enhance graduation rates.

CONCLUSION

Current approaches to mental health in school tend to overemphasize individually prescribed treatment to the detriment of prevention programs. Moreover, they are implemented as another fragmented set of interventions, and this contributes to the continuing marginalization of student and learning supports. Finally, when the focus is on individuals' problems, mental health interventions contribute to the widespread undervaluing of the human and social capital represented by students, their families, and a wide spectrum of other resources in the community

As this issue of *Contemporary School Psychology* indicates, student support personnel think about mental health in schools as having the potential to play a significant role in school improvement efforts. To do so, however, involves doing much more than expanding the range of mental health approaches. Needed is a fundamental transformation of student and learning supports so that all the fragmented pieces are unified as a primary and essential component that is fully integrated into school improvement policy and practice at every school. Such a transformation is essential to enhancing achievement for all, closing the achievement gap, reducing dropouts, and increasing the opportunity for many more schools to be valued as treasures in their neighborhood.

The bottom line is that it is time to adopt a comprehensive concept as the umbrella under which those who push for expanding the focus on mental (and physical) health must embed themselves. A health agenda (and especially a clinical health agenda) by itself is too narrow to fit into the broad mission of schools in our society and is inadequate for enabling equity of opportunity for all students to succeed at school. We can continue to build a few islands of excellence (demonstrations, pilots) and "Cadillac models," but with over 90,000 schools in the U.S.A., the scale of need demands moving quickly in fundamentally new directions.

All this has revolutionary implications for professional preparation of all student support personnel. In the next decade, although some current roles and functions will continue, many will disappear, and others will emerge. Opportunities will arise for student support staff not only to provide direct assistance, but to play increasing roles as advocates, catalysts, brokers, and facilitators of reform and to provide an increase variety of consultation and inservice training. All who work to address barriers to learning and teaching must be prepared to carry out system development and transformation roles and functions and to participate fully and effectively on school and district governance, planning, and evaluation bodies. To do less is to make values such as *We want all children to succeed* and *No child left behind* simply rhetorical statements.

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A Grounded Theory for Identifying Students with Emotional Disturbance: Promising Practices for Assessment, Intervention, and Service Delivery

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A qualitative grounded theory study examined how practicing professionals involved in the ED identification process reconstructed the category of "emotional disturbance" as it applied to students in an alternative educational setting. A grounded theory integrates six emergent themes and essentially reframes the existing ED criteria in contemporary practice. The new grounded theory reflects a move away from "exclusive" identification practices toward a more collaborative and reflexive problem-solving model with a focus on student need and best interest. Implications of the emergent grounded theory for policy and practice and the changing role of the school psychologist are discussed.

KEYWORDS: emotional disturbance, social maladjustment, exclusionary clause, special education, grounded theory

Children and youth with emotional and behavioral disorders are considered the most under-identified and underserved of all the disability groups (Forness & Kavale, 2001; Gresham, 2005, 2007; Merrell & Walker, 2004). Without proper identification and treatment such students pose substantial challenges to their teachers, administrators and peers, including classroom disruptions and school safety issues. Moreover, longitudinal studies indicate that, compared to their non-disabled peers, youth with emotional and behavioral disabilities experience higher rates of delinquency, juvenile incarcerations, school dropout, teen pregnancy, suicide, and substance abuse (Wagner & Cameto, 2004; Wagner, Kutash, Duchnowski, & Epstein, 2005).

Forness and Kavale (2000) stated, "Of several challenges that continue to face special education regarding children with emotional or behavioral disorders, the problem of eligibility is among the most pressing" (p. 267). Epidemiological estimates indicate that approximately 20%, or one in five school age children, exhibit a mental health condition causing at least mild functional impairment (Bazelon Center for Mental Health Law, 2004; Department of Health and Human Services, 1999; National Institute of Health, 2001). In contrast, the percentage of students identified for special education supports and services under the classification of emotional disturbance (ED) has remained constant at approximately 1% of the school-age population (Forness & Kavale, 2001; National Center for Education Statistics, 2005; U.S. Department of Education, 2008).

Many of the problems associated with the under identification of students with behavioral and emotional problems for appropriate supports and services are attributed to the federal definition of emotional disturbance found in IDEA (Gresham, 2005, 2007; Hughes & Bray, 2004; Merrell & Walker, 2004). The identification controversy focuses on an "exclusionary clause" that essentially prohibits students with social maladjustment (SM) from receiving special education services under the criteria for emotional disturbance (ED). Critics have referred to the definition of ED as "nebulous and highly subjective" (Gresham, 2005, p. 215), "vague and uncertain" (Olympia, Farley, Christiansen, Pettersson, Jenson & Clark, 2004, p. 835) and even "bordering on oxymoronic" (Gresham, 2007, p. 330). Bower (1982) summarizes, "When such definitions limit or prescribe who may or may not receive services, the definitional problem becomes significant for children, their families, and school systems" (p. 55).

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THE DEFINITION OF EMOTIONAL DISTURBANCE

The federal criteria for emotional disturbance found in the Individuals with Disabilities Education Act (IDEA, 1997; IDEIA, 2004) specify that a student must exhibit one or more of five characteristics, over a long period of time, and to a marked degree that adversely affects educational performance. The five characteristics are (a) an inability to learn that cannot be explained by intellectual, sensory, or health factors; (b) an inability to build or maintain satisfactory interpersonal relationships; (c) inappropriate types of behaviors or feelings under normal circumstances; (d) a general pervasive mood of unhappiness or depression; and (e) a tendency to develop physical symptoms or fears associated with school or personal problems.

Additionally, Section 34 CFR 300.8 (c)(4)(ii) of the definition states, "Emotional Disturbance includes schizophrenia. Emotional Disturbance does not apply to children who are socially maladjusted, unless it is determined that they are emotionally disturbed." The latter is referred to as the "exclusionary clause," because it essentially excludes students considered to be socially maladjusted from receiving special education services under the criteria for ED (Costenbader & Buntaine, 1999).

Background of the Definition

The etiology of the definition of ED incorporated in the Education of All Handicapped Children's Act (1975) and subsequently IDEA (1997) and IDEIA (2004) can be traced to psychologist Eli Bower's landmark study of the characteristics of ED in children (Bower, 1982; Duncan, 2007; Merrell & Walker, 2004). Bower's defining characteristics of ED are based on a 1957 study of over 6,000 school-age children in 200 classes at the elementary, junior high, and high school level in 75 school districts across the country. Unbeknownst to their teachers, 207 of these children (162 boys and 45 girls) were designated as emotionally disturbed and participated in mental health services. Based on the analysis of approximately 6,000 returns, the major differences in behaviors between the designated and non-designated students resulted in the five characteristics included in the federal definition of ED.

With few exceptions, the federal definition of ED has undergone minor alterations since the initiation of the Education of All Handicapped Children's Act in 1975. One change was that the original definition included students identified with autism. This term was removed from the category of ED in the early 1980s and placed in the communication disorders group. Autism later became its own disability category. In 1997, with the authorization of IDEA, the term *seriously* was removed from the federal definition; instead of *seriously emotionally disturbed*, the term became *emotionally disturbed* or ED (IDEA, 1997). Despite strong appeals from professional organizations (Forness, 2003; Forness & Knitzer, 1992; National Association of School Psychologists, 2007), there were no significant changes made in the definition of emotionally disturbed in the re-authorization of IDEA in 2004. In summary, students considered to be socially maladjusted have been excluded from coverage under the special education classification of ED since the inception of the Act in 1975.

OVERVIEW OF THE ARTICLE

This article reviews the results of a qualitative grounded theory dissertation study that examined how practitioners in an alternative and correctional education setting identified students with emotional and behavioral difficulties for special education services, given the criteria for ED. A review of the literature suggested that the problem of eligibility for special education services under the classification of ED is compounded by definitional problems surrounding the terms ED and SM as well as ambiguity associated with the exclusionary clause (Gresham, 2007; Hughes & Bray, 2004; Merrill & Walker, 2004; Olympia et al., 2004). Further, the literature revealed a lack of an underlying theoretical foundation for the definition of emotional disturbance and consistent processes by which practitioners address these criteria. Thus, a qualitative grounded theory research design was implemented to explore a primary and secondary research question posed by the study:

1. How do practitioners identify students with emotional and behavioral difficulties for special education services under the classification of emotional disturbance?
2. How do practitioners distinguish between emotional disturbance and social maladjustment for purposes of special education classification?

GROUNDED THEORY METHODOLOGY AND RESEARCH DESIGN

Grounded theory employs a systematic set of procedures to inductively develop theory that is "grounded" in data collected directly from participants' on the basis of their lived experiences (Charmaz, 2006, 2008, 2009; Fassinger, 2005; Glaser & Strauss, 1967; Strauss & Corbin, 1990, 1998). The theory produced from grounded theory methodology is based in practitioners' real-world practice, is sensitive to practitioners in the setting, and represents the complexities found in participants' experiences. The ultimate aim of a grounded theory study is to generate new theory "from the data that accounts for data" (Charmaz, 2008, p. 157). Glaser (1992) stated, "Grounded theory renders as faithfully as possible a theory discovered in the data which explains the subjects' main concerns and how they are processed" (p. 14).

Grounded theory methodology was best suited for this study because the research questions and problems indicated the need to develop a sound theoretical foundation for identifying emotional disturbance and because a sound theoretical foundation does not currently exist. Further, the existing ED identification criteria lack clear guidelines for defining social maladjustment and for distinguishing between ED and SM for purposes of special education classification. Skeat and Perry (2008) surmise that grounded theory is considered to be an appropriate choice for a research study "when a phenomenon has not been adequately described, or when there are few theories that explain it" (p. 97).

Context of the Study

A grounded theory research design was implemented in the context of a county alternative and correctional education program, which serves approximately 8,000 children and youth enrolled in juvenile corrections, social service, and community day school settings in a large suburban county in Southern California. A profile of typical youth enrolled in this setting involves adolescents who are referred by local school districts, or temporarily placed in group homes, or incarcerated in local probation or sheriff operated facilities, on probation, homeless, or who are teen parents (OCDE, 2008). As a high proportion of such students exhibit complex emotional, social, and behavioral needs, this setting was well suited for exploring practitioners' perceptions of ED and their underlying social and psychological processes for distinguishing between ED and SM for purposes of special education classification.

Participants

The participants were 27 practicing professionals, and one parent, involved in the ED identification process for students enrolled in the county alternative education programs and who were referred for special education services. The practitioners were eight school psychologists, eight administrators from county and local school districts, three special education and general education teachers, two clinicians, and two designated instructional service providers – a speech and language specialist and a school nurse. Four practitioners were representatives from collaborative county agencies including a psychologist from the County Mental Health Care Agency, the coordinator of Foster Youth Services, and a juvenile court probation officer. One parent of an emotionally disturbed student also participated.

METHODS

Signature characteristics of a grounded theory approach are the processes of constant comparison whereby data are continually compared and contrasted at each level of analysis; theoretical sampling where concepts arising from the data guide the researcher to subsequent data collection; and theoretical sensitivity, which relies on the researcher's intuitive and interpretive analysis of the data (Charmaz,

2006, 2008; Glaser & Strauss, 1967). In a grounded theory study, data collection and analysis procedures continue until "saturation" is achieved, where "new data is constantly compared to emerging concepts until no new themes, categories, or relationships are discovered" (Fassinger, 2005, p. 157).

Data Collection

Data collection consisted of the following four methods: (a) semi-structured interviews conducted with each of the 28 participants in the study; (b) five focus group interviews conducted with small groups of participants on topics selected from critical issues that emerged from the data, such as substance abuse and emotional disturbance and trauma-induced emotional disturbance; (c) document reviews collected from over 300 pages of case conference notes, multi-disciplinary assessment reports, parent correspondence, evaluations for county mental health services, and relevant inter-office email correspondence; and (d) five participant observations conducted in classrooms and programs for students with emotional and behavioral disabilities throughout the county. Because the sampling procedures in a grounded theory study are theoretically driven, participants were added and procedures, such as the structured interview questions, were modified based on concepts emerging from the data. For example, the director of Foster Youth Services was added as an interview participant following an emerging line of inquiry about trauma and emotional disturbance. Focus groups were conducted with small groups of practitioners to further develop concepts involving critical topics that emerged from the data, such as substance abuse and emotional trauma. Documents such as mental health evaluations and case notes were reviewed as they emerged through the simultaneous processes of data collection and analysis. Such qualitative data collection methods served to contextualize and "ground" the data in a contemporary practice setting.

Data Analysis

Three distinct but overlapping generic stages of data analysis were implemented including the initial, interim, and theoretical stages. Within the grounded theory approach, these generic stages translated to the processes inherent in open coding, focused coding, and theoretical coding. *Open coding* refers to the first level of coding in grounded theory analysis, "in which data are transcribed and broken down into units of meaning" (Fassinger, 2005, p. 160). During open coding, the researcher labels and assigns units of meaning to incidents, actions, and events derived from the data. *Focused coding* occurs as the researcher begins identifying preliminary themes and concepts emerging from the data. In this stage the researcher "focuses" on the most commonly occurring codes. *Theoretical coding* is the final stage in which the researcher begins merging concepts into groups or thematic categories. The grounded theory emerges from an analysis of the interrelationships among the themes. As recommended in grounded theory methodology, all stages incorporated signature grounded theory processes of constant comparison, theoretical sampling, and theoretical sensitivity.

FINDINGS

Grounded theory is inductively developed through systematic analysis of theoretical building blocks, including codes, concepts, categories, and themes, which are then integrated into an emergent grounded theory. Following the grounded theory research design, the data – which yielded over 500 pages of transcribed interviews, observations, and field notes – were analyzed in stages corresponding to initial, focused, and theoretical coding processes. In the initial stage of data analysis, the researcher engaged in line-by-line open coding to label and assign units of meaning to incidents, actions, and events in the transcribed data. For example, participants offered constructs such as "depression," "anxiety," and "mood disorders" as descriptors of emotional disturbance. In the interim stage of data analysis, focused coding involved reconceptualizing the most frequent codes into conceptual categories. Focused codes representing concepts such as "relational difficulties," "social skills deficits," and "lacking peer acceptance" were grouped into the larger conceptual category of social functioning. Integration of categorical concepts led to the development of the six emergent themes that formed the grounded theory. In sum, the findings of the study are represented by six emergent themes that reflect the core

social and psychological processes practitioners are implementing to identify students with emotional disturbance.

Emergent Theme One: Practitioners identified emotional disturbance along three inter-related dimensions – a social, behavioral, and emotional. Emergent theme 1 concerns ED as having three interrelated dimensions, social, behavioral, and emotional, which practitioners used in identifying students with ED. According to the participants, students with emotional disturbance were identified as (a) struggling socially with interpersonal relationships; (b) demonstrating atypical behaviors and extreme reactions; and (c) having difficulty managing their feelings and emotions. Practitioners emphasized the interrelatedness of the three dimensions of ED. For instance, case notes reflect one practitioner's observation that,

> *"Levi's [a pseudonym] changing mood influences his classroom behavior and his ability to form consistent and lasting relationships." One psychologist commented, "Oftentimes when we work with our kids we find they don't necessarily always fit one category, under that criterion. There's maybe a combination of one, two, or three characteristics."*

Emergent Theme 2: Practitioners distinguished between ED and SM with respect to the nature of the student's social, behavioral, and emotional functioning. Emergent theme 2 concerns how practitioners distinguished between ED and SM. Essentially, practitioners distinguished between ED and SM with respect to (a) the nature of the student's interpersonal relationships; (b) the nature of the student's behavior; and (c) the student's ability to control and manage his or her emotions. For example, a special education administrator stated:

> *So as far as SM criteria, the simplest way I tend to look at those issues is, what degree of control is the student able to operationalize or recognize? How much of it is their own choice versus how much of it is the result of things that they don't have control over?*

Practitioners discussed their concerns about the subjectivity that is often involved in distinguishing between ED and SM. One psychologist explained:

> *I think a lot of times we have to argue whether it's conduct or emotional issues. That's when I find it difficult. Sometimes there are cases where you can't be sure if it's one or the other. It's a person's interpretation of the data.*

Emergent Theme 3: Practitioners implemented reflexive and collaborative identification processes. Emergent theme 3 concerns identification processes as reflexive and collaborative. Practitioners implemented key processes that addressed the unique needs and challenges of students in this setting. Specifically, these processes involved (a) adhering to the child find process; (b) collaborating with peers; (c) exploring the etiology of the child's behavior; and (d) linking students' needs to available services.

A school psychologist discussed the value of collaborative teamwork:

> *And I think that's what I really value about it being a team, is that you get to hear so many voices. Now a lot of people look to the school psychologist to make that determination, which I think is one flaw that happens too often. But the school psychologist should just share his or her information and ask, "What does the team think?" So it allows for a more complete discussion of what the child needs.*

Emergent Theme 4: Practitioners recognized new student trends that are complicating the identification process. Emergent theme 4 concerns student trends that are compounding the identification process. Practitioners recognized new student trends such as co-occurring emotional and behavioral disorders, substance abuse and ED, and trauma induced ED. For example, a special education teacher commented on the recent rise in cases involving substance abuse and mental illness:

> *Of the kids that have been referred over the last few years, I've seen a lot of kids present as basically psychotic, probably because of drugs. So, that's a whole different type of kid that I haven't so much worked with.*

Such issues, which are not specifically addressed in the existing ED criteria, prompted practitioners to engage in pragmatic problem-solving. For instance, one practitioner described her pragmatic problem-solving approach to identifying a student with both substance abuse and ED:

> *My feeling, and it's not even in a book, is that if it's been a period of time – say over six months without drug use – and they're still hearing voices and having hallucinations, then it's a drug induced psychosis.*

Emergent Theme 5: Practitioners' decisions were informed by ethical considerations related to caring. Emergent theme 5 concerns the importance of ethical considerations in the identification process. The data revealed that practitioners took into account ethical considerations related to caring, focusing on students' best interests, and establishing harmonious professional relationships. In a focus group, a school psychologist described how feelings of compassion might influence his approach to determining eligibility under the classification of emotional disturbance:

> *What do you do when you think about it? I have compassion. I'm going to bend this.*

Practitioners expressed professional conflicts associated with the exclusionary clause. Referring to students with socially maladjusted behaviors who did not qualify for special education services, one psychologist stated:

> *The problem I have with the exclusionary clause is – that's where it stops. You don't qualify for special education, that's the end… It's like a death sentence!*

In a focus group discussion about ethical conflicts and the exclusionary clause, another practitioner asserted:

> *So who's to say that that kid does not qualify for services because he's SM versus an ED, is kind of how I see it. If a kid has needs, they have needs!*

Emergent Theme 6: Practitioners acknowledged socially unjust practices that impinged upon the identification process. Emergent theme 6 concerned the need to take into account social justice perspectives. Practitioners acknowledged socially unjust practices that impinged upon the process of identifying students with ED: under-identifying students with ED, delays in providing services to ED students, and shifting the responsibility for identifying ED students from one organization to another. One psychologist working in a traditional high school setting observed how students with behavior and emotional disorders are often marginalized:

> *You see these kids who absolutely are unable to sit in a classroom, because their minds are going 100 mph. And they might be filled with agitation or rage, and certainly not feeling that today's history lesson is going to make a difference in their lives ... But our school system is a rigid system. What we ask of kids is to sit in place for 45 minutes and listen to a teacher talk about a subject that you're not really interested.*

DISCUSSION

The integration of the six emergent themes constitutes the new theory, which reflects practitioners' re-construction of the category of emotional disturbance as it applied to students in an alternative education setting. The emergent grounded theory suggests that practitioners were moving well beyond the narrow confines of the federal definition of ED, resulting in a reframing of the federal criteria in contemporary practice.

The federal definition and criteria for emotional disturbance are based on five discrete and subjective behavioral characteristics. An 'exclusionary clause' distinguishes between students with ED and SM, conceptualizing these as competing entities. Moreover, the existing criteria are based on research conducted over five decades ago, on children that had limited exposure to violence, trauma, substance abuse, and other societal factors that pose challenges to practitioners in contemporary education settings.

A distinction between the outcomes of this study and the federal criteria was that practitioners conceptualized ED more holistically along three interrelated dimensions, rather than limiting their conceptualizations to the identification of five discrete characteristics included in the federal guidelines. The three dimensions of ED described by practitioners in this study integrated the areas of social, behavioral, and emotional functioning together more holistically, taking into consideration "the whole child." The inter-connectivity between social, behavioral, and emotional functioning is supported by Beck, Beck, Jolly, and Steer (2005), the authors of *Beck's Adolescent Rating Scales,* who describe ED as a "constellation" of symptoms that are often "difficult to distinguish and often do not crystallize into distinctive syndromes until late adolescence" (p. vii).

Another distinction is seen in practitioners' interpretation of the exclusionary clause. Rather than two competing polarities, practitioners examined ED and SM along three fluid continua of social, emotional, and behavioral functioning. Bower's original research, on which the federal ED definition and criteria are based, established a connection between social, behavioral, and emotional functioning by identifying the characteristics of ED as inclusive of "inappropriate types of behaviors" and "an inability to build or maintain satisfactory interpersonal relationships with peers and teachers." By implementing reflexive processes, such as collaborating with multiple service providers and exploring the etiology of behaviors, practitioners identified relationships between students' maladaptive behavioral functioning and underlying emotional concerns; for instance, externalizing behaviors stemming from a child's emotional trauma, or co-morbid behavioral and emotional conditions, such as ADHD and depression. The inter-connectivity between social, emotional, and behavioral functioning in children and adolescents is demonstrated by an abundance of research in neuroscience and psychiatry (Forness & Kavale, 2001; Perry, 2006; Perry & Azid, 1999; Van der Kolk, 2006).

Emergent themes 5 and 6 reflect practitioners' concerns and tensions regarding the exclusionary clause that impinged upon the identification process. Frick and Faircloth (2007) acknowledged "moral tensions" among administrators involved in special education decisions. Forness (1992) discussed the "professional dilemma" posed by the exclusionary clause:

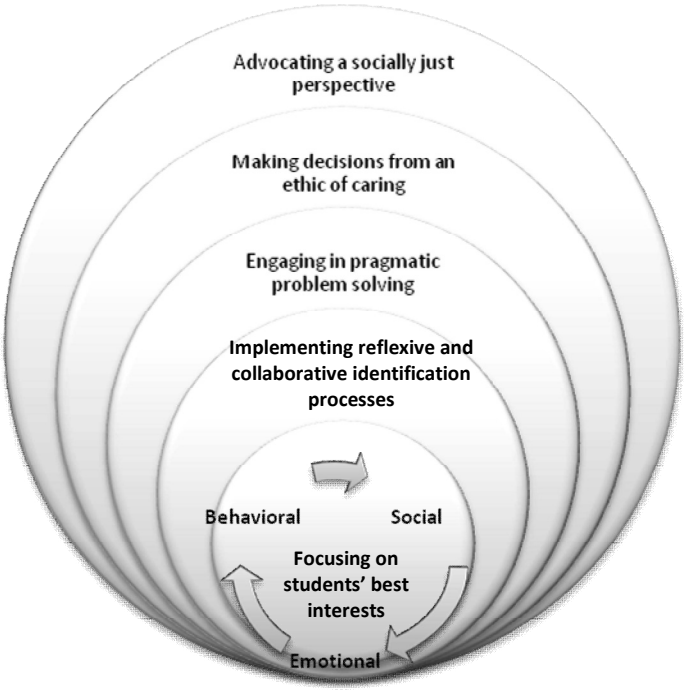
School psychologists, special educators, school counselors, and others concerned with children or youth with emotional or behavioral disorders face a rather profound professional dilemma in regard to social maladjustment. In the majority of states, rendering a judgment about special education eligibility often forces them to make a differential diagnosis between serious emotional disturbance and social maladjustment with rather flimsy procedural guidelines, questionable empirical precedent, and frequently incomplete or one-sided case histories. (p. 4)

Practitioners' resolution of such moral tensions pointed to a decision making process that takes into account a caring ethical perspective (Noddings, 2003). Practitioners' ethical considerations related to caring are consistent with the "Best Interests" model (Stefkovich, 2006), which places "the best interests of the students" at the heart of ethical decision-making. Further, such considerations led to practitioners' advocacy for the rights and needs of students with emotional and behavioral disabilities in alternative education settings.

THEORETICAL MODEL

Taken together, the six emergent themes constitute a new grounded theory that explains how practitioners identify students with ED and how they interpret ED and SM for purposes of special education classification. Figure 1 illustrates the grounded theory as six concentric circles reflecting the six emergent themes – the core social and psychological processes – that explain how practitioners are identifying students with ED. At the center of the model are students' needs and best interests. The core circle depicts the three inter-related dimensions – the social, behavioral, and emotional – by which practitioners examine ED and SM. The six shaded, concentric circles indicate the interactive and reflexive processes involved in identifying ED and SM. Moreover, the outer two circles suggest that an ethic of caring and a socially just perspective guide the ED identification process.

Figure 1. *A theoretical model for identifying students with ED.*



IMPLICATIONS

The emergent grounded theory has implications for policy and practice regarding the ED identification criteria and procedures for identifying and meeting the needs of students with emotional and behavioral disabilities in contemporary education settings.

Implications for Policy

Recommendations for special education policy stemming from this study include: (a) the need to update the federal ED definition and criteria to reflect current findings that demonstrate the interrelationship between social, emotional and behavioral functioning in children and adolescents; (b) the need to develop procedural guidelines to address identification problems posed by contemporary student trends, such as substance abuse and ED and co-existing emotional and behavioral conditions; and (c) the need for policy decisions that are informed by ethical considerations and a socially just perspective.

Further, the new grounded theory supports the rationalization for the alternative emotional/behavioral disturbance (E/BD) criteria proposed by Forness and Knitzer (1992) and endorsed by the NASP (2007). Merrell and Walker (2004) stated, "The term *Emotional* or *Behavioral Disorder* itself has the face validity of being more descriptive and less stigmatizing than ED" (p. 907), a perspective echoed by several participants in this study. Moreover, the outcomes of this study point toward a move away from "exclusive" identification practices and toward the establishment of comprehensive school-wide decision-making and intervention systems, such as Response to Intervention (RtI) and School-based Mental Health Models.

Implications for Practice

The theoretical model resulting from this study envisions a collaborative and consultative role for the school psychologist as an integral member of a comprehensive school-wide intervention team. As stated by Olympia et al., (2004), "The role of the school psychologist as gatekeeper is contrasted to that of the

more positive role as facilitator" (p. 835). The expanded role of the school psychologist may include consultation with teachers, administrators, and other education staff; collaboration with interagency service providers, such as mental health, probation, and social services; and resource person regarding identification and intervention practices for students with emotional and behavioral disabilities.

The emphasis on reflexive identification processes suggests that school psychologists will begin to implement alternative assessment approaches with students who demonstrate emotional and behavioral needs. Contemporary practices may include reflexive processes such as child find, collaboration among multiple service providers, exploring the etiology of behavior, and linking student need to services. Further, the school psychologist, who is trained to facilitate collaborative intervention planning and strength and needs based assessment, is equipped to facilitate other evidenced-based identification and intervention processes such as RtI, Positive Intervention and Supports (PBIS), Wraparound, and Schoolwide Mental Health Models (Adelman & Taylor, 2010; Eber, 2003; Gresham, 2005; 2007; Heathfield & Clark, 2004, Hoagwood & Johnson, 2003).

Finally, the emergent theory envisions that school psychologists will take an active role in leading reform in special education policies. An ethic of caring and a socially just perspective suggest that school psychologists will confront assumptions and practices that currently serve as barriers to identifying students with emotional and behavioral disabilities for special education supports and services. Moreover, school psychologists will take a lead role in advocating for the rights and needs of students with emotional and behavioral disabilities.

Future Research Directions

Merrell and Walker (2004) contend that the current focus on the exclusionary clause may actually hinder the advancement of social maladjustment as a subspecialty in special education. Heathfield and Clark (2004) assert that it is time to move beyond the ED/BD controversy and more efficaciously address the needs of students with emotional and behavioral disabilities. Therefore, a recommendation for future research resulting from this study is to focus on identification and intervention models, including RtI and PBIS, that more efficaciously identify and meet the needs of students with emotional and behavior disorders.

SUMMARY AND CONCLUSIONS

The emergent theory generated by this study is grounded in practitioners' lived experiences, is sensitive to their concerns, and reflects the complexities of their real world practice. As such, the new grounded theory reflects contemporary perspectives about identifying and meeting the needs of students with emotional and behavioral difficulties: social, emotional and behavioral functioning as fluid and interrelated dimensions; identification processes as collaborative and reflexive; pragmatic problem-solving approaches in response to new student trends; and decision making informed by ethical considerations and a socially just perspective. The emergent theory holds promise for reconstructing the ED identification process from a student centered perspective and for addressing the rights and needs of students with emotional and behavioral disabilities.

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TOC

School Psychologists' Knowledge and Use of Evidence-based, Social-Emotional Learning Interventions

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This article describes the results of a national survey pertaining to school psychologists' knowledge and use of evidence-based, social-emotional learning (SEL) interventions. For the study, 331 school psychologists responded to a survey that listed (a) techniques for identifying SEL interventions, (b) 16 SEL programs that have been identified by more than one source as having strong evidence for their effectiveness, and (c) factors that school psychologists may use for deciding on a program to use in their schools. Participants in the survey were asked to rate their opinions about selecting and using SEL interventions, as well as their knowledge and experience with various SEL programs that have received much research attention. Results of the survey indicated that school psychologists have limited awareness of the majority of published, evidence-based SEL programs. These results are of interest to school psychologists and other school personnel who make decisions about purchasing and implementing SEL programs. Implications for training and practice are discussed.

KEYWORDS: Evidence-based interventions, school psychologists, knowledge and use, social-emotional learning

One of the primary roles and responsibilities of school psychologists working in schools is to work with school staff (e.g., teachers, counselors) and parents to design effective interventions to address students' behavior problems (Merrell, Ervin, & Gimpel, 2006). Another responsibility school psychologists have is to ensure that the interventions they select have sufficient research-based evidence to increase the likelihood they will be effective for the individual with whom they are working (Kratochwill & Shernoff, 2004). Research-based evidence for interventions is gathered through multiple studies in which positive effects from the specific intervention under scrutiny have been demonstrated. Numerous groups (e.g., Collaborative for Academic and Social and Emotional Learning, Office of Juvenile Justice and Delinquency Prevention) have summarized existing intervention studies and have determined which intervention programs do and do not have strong evidence to support their effectiveness. It is unknown, however, if school psychologists actually use this information when selecting interventions or if so, how they determine which interventions to use. Thus, the purpose of this study is to contribute to the existing knowledge base about how school psychologists go about choosing and using research-based interventions for students experiencing social, emotional, or behavioral difficulties.

Practicing school psychologists often are the decision-makers in schools regarding the purchase and use of published intervention programs. As school budgets tighten, it becomes increasingly necessary to select programs that have the best evidence for effectiveness so school personnel and taxpayers do not feel that money and time are being wasted. An analysis of school psychologists' awareness and use of evidence-based, social-emotional interventions has important implications for preservice training, professional development, and ongoing practice. Resources in these areas should be devoted to best practices for ensuring positive outcomes for children and youth, and understanding the current state of practice is a first step.

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Published social/emotional/behavioral intervention programs exist that address the diverse needs of students. Many of these interventions have been well-researched to demonstrate their effectiveness with school populations. Others, however, have limited or no research to demonstrate their effectiveness. School psychologists are in a primary role to assist school administrators and other personnel in making decisions about effective programs to promote desired behavior in all students and to provide interventions for those students who need more direct social or behavioral skill instruction. As consultants and experts in behavioral theory and research, school psychologists have the skills to review programs and help determine the best ones to fit the local needs of a particular school. However, given that up to 70% of a school psychologists' time might be spent in activities such as assessment and consultation about individual students, little time is left for research reviews and large-scale program implementation (Bramlett, Murphy, Johnson, Wallingsford, & Hall, 2002).

SOCIAL AND EMOTIONAL LEARNING

As more and more children in schools exhibit mental health concerns and behavior difficulties, addressing their needs is a critical and expanding role of school psychologists (Doll & Cummings, 2008). Recently, there has been an important movement to develop and publicize research-based social/emotional/behavioral interventions for school psychologists and other school personnel to use (Greenberg et al., 2003). Zins and Elias (2006) call these interventions social-emotional learning (SEL) programs. They define SEL as "the capacity to recognize and manage emotions, solve problems effectively, and establish positive relationships with others" (p. 1). SEL requires the development of social, behavioral, and emotional skills. As such, SEL interventions target these skill areas. In addition to promoting children's social and emotional competency, SEL interventions also create learning environments that are safe, caring, and orderly (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2003). By enhancing students' social skills and creating environments that foster learning, SEL interventions indirectly promote better academic performance as students are more engaged in and connected to their schools. Numerous research studies have demonstrated that well-implemented, well-designed and sustained SEL programming can have a positive impact on youth outcomes (e.g., Cook, Murphy, & Hunt, 2000; Elias, Gara, Schuyler, Branden-Muller, & Sayette, 1991; Solomon, Battistich, Watson, Schaps, & Lewis, 2000). Students' attitudes (e.g., self-efficacy, respect for teachers, coping with school stressors), problem behaviors (e.g., poor attendance, class disruptions, poor class participation, substance use), and performance (e.g., academic skills, problem-solving skills) improve as a result of effective SEL programming (Greenberg et al., 2003; Zins & Elias, 2006).

EVIDENCE-BASED INTERVENTIONS (EBIs) DEFINED

Fortunately, there are many SEL programs in existence. Unfortunately, many claim to be effective, or "evidence-based," without sufficient empirical support to make such an assertion. The term "evidence-based" refers to the quality of the scientific evidence that is presented to demonstrate an intervention produces its intended effects (Hoagwood & Johnson, 2003). Numerous governmental and private agencies have created their own operational definitions of "evidence-based" and created web-based lists of programs that meet their standards (Appendix A contains of a list of several such agencies that rate SEL programs). However, the criteria used by the various agencies to rate programs may differ, as may the terminology they use to describe effective programs (McKevitt et al., 2009). As a result, a program rated very effective by one agency may not be as highly endorsed by another agency. Such discrepancies may cause confusion among practitioners and lead them to adopt a program that may have insufficient empirical evidence (McKevitt et al, 2009).

CURRENT PRACTICES IN EVIDENCE-BASED SEL INTERVENTIONS

Given the interest in the field for promoting EBIs and the legal mandates set forth by NCLB for using them, it seems evident that school psychology training programs and current practitioners should be addressing this issue.

Training. Increasingly, school psychology training programs are focusing on the use of EBIs (Shernoff, Kratochwill, & Stoiber, 2003). Students who have been trained to use evidence-based interventions are more likely to use them in practice and are more accountable for their services (Kratochwill & Stoiber, 2000). Shernoff et al., (2003) conducted a survey of school psychology training directors to assess the degree to which programs provided training in EBIs. They assessed program directors on their knowledge about EBIs, level of student exposure to EBIs, and the importance they placed on EBIs in their training programs.

Shernoff et al. (2003) found that although overall knowledge of individual EBIs was low, training directors placed great importance on the value of training EBIs. They also found that students were being taught criteria for determining what makes an intervention effective, but rarely had opportunities to apply this knowledge in practice. The authors concluded that training programs would benefit from more information about EBIs, and that it would be "critical to explore the interventions that practitioners are currently using in the field" to determine the extent such training is being applied (Shernoff et al., p. 481).

Practitioner Use. If school psychology training programs are not adequately teaching direct implementation of EBIs, then training on their use becomes a practice issue. Kratochwill and Shernoff (2004) called for the need to integrate EBIs into school psychology practice. They proposed several strategies to make this possible, including (1) developing a practice-research network in school psychology; (2) ensuring that EBIs are examined in school-based contexts; (3) establishing guidelines for practitioners to use and evaluate EBIs in practice; (4) encouraging professional development opportunities for practitioners; and (5) creating partnerships with other professional groups also examining EBIs (e.g., APA Division 12). However, the current state for EBIs in school-based SEL interventions is generally poor due to the complexities of the "selective and inconspicuous" interactions between classrooms, teachers, students, and behavior (Kehle & Bray, 2004, p. 420). Such complexities make effectiveness research very difficult for SEL interventions. Furthermore, Waas (2002) and Christenson, Carlson, and Valdez (2002) cautioned that adopting EBIs from various published lists (as described above) may squelch professional decision making and clinical judgment. Therefore, practitioners are left with the reality of schools (e.g., budget issues, teachers' willingness to implement interventions, complex student behavior problems) and pressures of legal mandates, yet the desire to design good interventions based on data and clinical judgment about individuals or groups of students.

This study addresses the current state of practitioners' knowledge and use of EBIs for social, emotional, and behavioral concerns. While Shernoff et al. (2003) addressed the training of EBIs in school psychology training programs, they were left wondering how that training plays out in practice, especially given all of the constraints and pressures faced by psychologists in today's schools. Therefore, this study seeks to answer the following research questions: (1) How do practicing school psychologists learn about effective SEL interventions? (2) Are school psychologists aware of and using existing evidence-based SEL interventions? (3) What factors influence a school psychologist's decision to use a particular intervention program?

METHOD

Participants

Practicing school psychologists who are members of the National Association of School Psychologists (NASP) were invited to participate in this study. A survey was mailed to 1,400 NASP members randomly selected from the NASP membership database. The mailing list was limited to NASP members who identified themselves as practitioners in pre-kindergarten through grade 12 settings. Student and affiliate members were not included in the sample. A total of 331 school psychologists returned surveys, representing a 23.6% return rate. School psychologists from 44 states responded to the survey, with the highest percentage of respondents (22.7%) from the East North Central region of the United States, followed by 17.5% from the Mid-Atlantic region and 16.6% from the South Atlantic region. These percentages mirror the percent of NASP members from these regions (Fagan & Wise, 2007), as well as

the percentage of school psychologists nationally from these regions (Charvat, 2005). The mean years of experience for participants was 13.08 years (*SD* = 9.5; Range = 1-36), with 89.1% employed in a public school district. Participants served an average of 3.21 school buildings (*SD* = 3.45; Range = 1-26) and had psychologist-to-student ratios of 1:1409 on average (*SD* = 1206.5; Range = 18-11,000). The highest percentage of respondents served grades 3-5 (76.1%), followed by K-2 (75.2%), 6-8 (60.4%), pre-K (49.2%) and 9-12 (47.7%). Seventy-seven percent of respondents' highest degree earned was a Master's or Specialist degree.

Survey

The survey instrument, the *Social/Emotional/Behavioral Intervention Survey,* was developed by the author for use in this study. The survey was divided into four parts. Part 1 contained 12 items requesting information about respondents' employment characteristics. Part 2 contained nine items asking respondents how they learn about evidence-based SEL interventions. For the purpose of the study, evidence-based interventions were defined as treatments, interventions, or services for which experimental research has established as effective. Respondents circled the frequency (1=*Never,* 2=*Sometimes,* 3=*Often,* 4=*Always*) with which they relied on various sources for learning about effective interventions (e.g., internet, journal articles, training, colleagues).

Part 3 of the survey contained 16 items that assessed respondents' knowledge and use of 16 published, evidence-based SEL programs. The list of interventions came from extensive reviews of several popular research synthesis organizations that rate the quality of SEL intervention programs. Only organizations that have U.S. government sponsorship and/or university affiliation were chosen to ensure quality. Furthermore, only school-based programs rated highly (i.e., they have strong research evidence for their effectiveness) by at least three organizations were included in the list. Appendix B includes a list of the programs included on the survey with a brief description of each one. These same descriptors were provided in the survey for the respondents. Appendix A contains a list of the research synthesis organizations consulted for the study with their websites. For each program, respondents indicated their level of familiarity with the program (not familiar, somewhat familiar, very familiar) and their use of the program (never used it, others I know used it, I have used it).

Part 4 of the survey addressed practitioners' decision-making about selecting interventions and contained five items. These items listed various dimensions to consider when selecting interventions (e.g., cost, personnel time required, training required) and requested respondents to rate their perceived level of importance for each dimension (not important, somewhat important, very important). Respondents also rank-ordered the importance for intervention selection of the five dimensions. Finally, respondents were invited to add any additional comments in an open-ended portion of the survey.

An initial draft of the survey was piloted by five school psychology practitioners with at least 10 years of experience in the field. These practitioners provided suggestions to clarify directions and ambiguous wording of items, and to rectify other formatting issues. Their comments and suggestions were included for the final version of the survey. The data from the pilot surveys were not included in the analyses.

Procedure

Computer-generated addresses of randomly selected NASP members were obtained following NASP's approval of the study. Paper copies of the survey were mailed to 1,400 members with a cover letter explaining the purpose of the study and respondents' rights as research participants. The cover letter also contained brief descriptions of the intervention programs included on the survey along with each program's author's name and publishing company's website. A postage-paid envelope was included with each survey. Due to resource limitations and confidentiality concerns, follow-up reminders were not mailed, nor were incentives for participation offered. Graduate student assistants entered data from all returned surveys into a computerized database, and results were analyzed descriptively.

RESULTS

How do School Psychologists Learn about Effective SEL Interventions?

Respondents rated their frequency of using several methods for learning about SEL interventions on a 4-point scale with choices ranging from 1= *never* to 4 = *always*. A high percentage of the sample (71%) often or always rely on professional development activities to gain information about effective SEL interventions (*M*=2.8, *SD*=.63). Relying on past experiences also was rated by a majority (57.4%) of respondents as common methods for learning about interventions (*M*=2.62, *SD*=.65). Less than a third of respondents (27.8%; *M*=2.26, *SD*=.66) always or often rely on journal articles for learning about interventions, which unfortunately is the most direct way for learning about the evidence base of many interventions. In addition, while there are many popular research synthesis organizations available on the internet to describe interventions and summarize their research base, only 34.7% of respondents consult internet resources regularly (*M*=2.28, *SD*=.68). Complete results pertaining to this question may be found in Table 1.

Table 1: *Frequency of Respondents' Use of Various Sources for Learning about SEL Interventions*

		Percent of Respondents Endorsing			
Method	Mean Rating (SD)	Always (4)	Often (3)	Some-times (2)	Never (1)
Professional Development Activities	2.80 (.63)	10.0	61.0	26.6	1.8
Rely on Past Experiences	2.62 (.65)	6.6	50.8	39.3	2.7
Colleagues and Supervisors Tell Me	2.38 (.71)	4.8	35.6	50.2	8.5
Read Intervention Books	2.38 (.66)	3.9	35.3	53.8	6.0
Consult Internet Resources	2.28 (.68)	3.0	31.7	54.7	10.0
Review Original Publication Materials	2.28 (.83)	9.4	24.5	49.8	15.1
Review Empirical Journal Articles	2.26 (.66)	4.8	23.0	64.4	7.3
Rely on Graduate Training	2.14 (.81)	4.8	26.0	46.5	22.1
Consult Magazines and Newsletters	1.64 (.64)	0.3	8.2	45.9	45.0

To further explore this question, mean scores for each method of obtaining information about SEL interventions were compared by region and years of experience. No significant differences among regions were found in how practitioners learn about SEL programs, with the exception of reliance on graduate training. In this instance, practitioners from the East South Central Region relied significantly more on their graduate training than practitioners in other regions, $F(8, 319) = 2.378$, $p = .017$. For years of experience, there was an expected significant difference in reliance on graduate training, with those with less than 5 years of experience relying on their training significantly more than other practitioners, $F(3, 322) = 27.503$, $p < .01$. No other differences among years of experience were found.

Are School Psychologists Aware of and Using Existing Evidence-Based SEL Interventions?

To assess school psychologists' awareness of SEL interventions, respondents rated their level of familiarity on a 3-point scale (1=*not familiar/never heard of it;* 2=*somewhat familiar/heard of it but don't know a lot about it;* 3=*very familiar/heard a lot about it*) with 16 published evidence-based SEL

interventions. Table 2 shows the percentage of respondents who indicated if they were not familiar, somewhat familiar, or very familiar with the listed intervention programs. Overall, results show little knowledge about most published interventions. Interventions with the most familiarity (i.e., highest percentage of respondents indicating "very familiar") were *Second Step* (28.7% were very familiar), *I Can Problem Solve* (21.8%), *Good Behavior Game* (19.9%), *Olweus Bully Prevention Program* (18.4%), and *Project ACHIEVE* (11.8%). Interventions with the least familiarity (i.e., highest percentage of respondents indicating "not familiar") were *Responding in Peaceful and Positive Ways* (93.4% were not familiar), *Linking the Interests of Families and Teachers* (92.7%), *Al's Pals* (91.5%), *Lion's Quest* (83.4%), *Child Development Project/Caring School Community* (81.6%), *High/Scope* (74.3%) and *Social Decision Making/Problem Solving Program* (71.9%).

Table 2: *Percentage of Respondents' Level of Familiarity and Level of Use of SEL Interventions*

	Level of Familiarity			Level of Use		
Program	Not Familiar	Somewhat Familiar	Very Familiar	Never Used It	Others I Know Use It	I have Used It
Al's Pals	91.5	7.3	0.6	94.6	1.2	0.9
Olweus Bully Prevention Program	35.6	45.0	18.4	64.0	21.5	12.4
Child Development Project	81.6	14.2	3.6	89.4	3.6	3.6
Good Behavior Game	38.4	40.8	19.9	61.0	19.9	17.5
High/Scope	74.3	17.8	6.9	81.9	11.2	3.9
I Can Problem Solve	39.0	38.7	21.8	61.3	16.3	20.5
Linking the Interests of Families & Teachers	92.7	6.3	0	95.5	2.7	0
Lion's Quest	83.4	13.0	3.3	90.0	5.1	2.7
PeaceBuilders	59.5	31.1	9.4	75.8	16	5.7
Peace Makers	65.9	28.4	5.1	79.2	13.6	4.5
Project ACHIEVE	48.3	39.9	11.8	72.8	18.4	6.0
Promoting Alternative Thinking Strategies	60.1	33.5	6.3	81.6	1.8	5.1
Responding in Peaceful Positive Ways	93.4	5.1	1.2	92.4	2.7	1.5
Second Step	49.8	21.5	28.7	58.0	15.7	24.2
SOAR, The Seattle Social Development Project	69.8	27.2	2.7	85.8	10.9	1.2
Social Decision Making/ Problem Solving Program	71.9	21.5	6.0	82.2	7.9	6.9

Table 2 also shows the percentage of respondents indicating their level of use of each intervention program (1=*never used it,* 2=*others I know use it,* 3=I *have used it or have worked with others to implement it.*) Again, results show little use of most intervention programs. Interventions that respondents reported using most include *Second Step* (used by 33.9% of respondents), *Good Behavior Game* (37.4%), *I Can Problem Solve* (36.8%), *Olweus Bully Prevention Program* (33.9%), and *Project ACHIEVE* (24.4%). Interventions that have never been used by respondents were *Linking the Interests of Families and Teachers* (never been used by 95.5% of respondents), *Al's Pals* (94.6%), *Responding in Peaceful Positive Ways* (92.4%), *Lion's Quest* (90%) and *Child Development Project/Caring School Community* (89.4%).

One might hypothesize that those who reported they regularly read empirical articles to learn about SEL interventions would be more knowledgeable about them. Those who rated themselves as reading journal articles *often* or *always* (n = 237) were analyzed in the same manner described above for the total sample. There were virtually no differences between those who relied on empirical articles and those in the entire sample in levels of familiarity and use on any program. The same hypothesis was made for those who consult internet resources *often* or *always* (n = 115). This group was somewhat or very familiar with a higher percentage of programs than the total sample, indicating that web resources are a useful means for promoting knowledge about interventions. For example, of the total sample, 21.8% of respondents were very familiar with *I Can Problem Solve,* while 30.4% of those who frequently rely on web resources were *very familiar* with the program.

What Factors Influence a School Psychologist's Decision to Use a Particular Intervention Program?

Finally, respondents were asked to rate and rank the importance of five factors to consider when selecting interventions. Respondents used a 3-point scale (1=*not important,* 2=*somewhat important,* 3=*very important*) to rate importance of each factor, and then were asked to rank that factor (1-5) among the other factors. A majority of respondents indicated that research support for the program's effectiveness and personnel time required to implement the intervention were two very important factors to consider (79.8% and 66.2% rated these items as very important, respectively). Furthermore, these same items were also ranked as most useful among the five factors. Program cost was endorsed as very important by only 37.8% of respondents, while success of intervention for colleagues was ranked as the least useful factor to consider. See Table 3 for complete data relevant to respondents' decision-making about intervention use.

Table 3: *Rankings and Importance Ratings Pertaining to Respondents' Decision Making about Intervention Use*

Factor to Consider	Mean Ranking (SD)	Percent Indicating Very Important	Percent Indicating Somewhat Important	Percent Indicating Not Important
Research support for the program's effectiveness	2.15 (1.5)	79.8	17.2	.03
Personnel time required to implement	2.71 (1.1)	66.2	30.2	1.2
Amount of training required	3.14 (1.1)	48.9	46.8	1.8
Cost of program	3.36 (1.4)	37.8	54.7	5.1
Whether program worked for colleagues	3.55 (1.5)	40.2	49.5	7.9

Note. For rankings, 1=*most important;* 5=*least important*

Anecdotal Information from Open-Ended Comments

Respondents also were invited to add any comments to the survey, and 43 respondents chose to do so. The following were common themes that emerged from the anecdotal comments: (1) School psychologists in the district do not implement SEL interventions; (2) school psychologists in the district only test; (3) respondents used other interventions that were not listed, such as school-wide positive behavior support; (4) individuals, schools, or districts make their own programs and do not rely on published interventions; (5) preparation for the state test is emphasized over SEL interventions; and (6) interventions used are theory-based, not research-based.

Interestingly, the first two themes listed above have to do with school psychologists' roles and functions. It is possible that the majority of respondents had limited roles with SEL intervention planning and implementation. However, findings from the survey refute this supposition. As part of the survey, respondents were asked to rate their percentage of time engaged in typical school psychology activities. Across all respondents, direct assessment was listed as the most frequent activity (M=33.34% of time spent, SD=18.2), followed by paperwork/report writing (M=24.01%, SD=14.6), consulting with teachers/parents on social/emotional/behavioral issues (M=15.04%, SD=9.4), and direct intervention on social/emotional/behavioral issues (M=13.68%, SD=11.6). So, while it is evident that there may be some school psychologists with limited involvement in SEL issues, respondents reported over a quarter of their time, on average, addressed SEL consultation and interventions. This finding emphasizes the importance of selecting and using evidence-based interventions if so much time is spent with SEL issues.

Three of the four remaining themes pertained to the issue of the types of interventions implemented in schools. While it is difficult to generalize from these anecdotal comments, it seems likely there are school personnel who either (a) do not value evidence-based interventions or (b) find their own commonly used interventions to be more desirable than published programs. Obviously what is ultimately important is the effectiveness of an intervention on individual or group behavior change. If practitioners take care to document effectiveness of any intervention implemented, then whether a program has published empirical support is of less importance. Still, prior evidence for effectiveness enhances the likelihood an intervention will be successful.

DISCUSSION

This study examined practitioners' awareness and use of several published evidence-based SEL interventions, as well as their decision making about choosing and using SEL interventions. It is intended to shed light on the current state of practice with regard to EBIs for social, emotional, and behavioral concerns.

Familiarity with and Use of Evidence-Based SEL Interventions

In general, school psychologists surveyed in the current study were not well-informed about evidence-based, published SEL interventions. Professional development was the highest endorsed method for learning about EBIs, with 71% of practitioners often or always relying on these activities for learning about effective SEL interventions. Less than one-third of respondents indicated they used journal articles or internet resources regularly to learn about EBIs, although those who used internet resources were more knowledgeable about the interventions.

These findings have major implications for the promotion of evidence-based intervention in practice. First, one cannot assume that just because someone lists a study on a website or publishes an effectiveness study that then the intervention will be widely consumed. Clearly, most practitioners are not relying on their own research and investigation to identify desired SEL programs. Second, along with consulting with colleagues, professional development was the preferred way for gaining information about EBIs. Therefore, professional development activities must contain information related to the selection and use of EBIs in practice and numerous opportunities must exist for practitioners to engage in these activities.

According to the survey, there are many evidence-based SEL interventions in existence that are not being used commonly; such interventions may be a better match for students and schools than those that are more heavily promoted and used. In the current study, eight out of the 16 programs listed were unknown by at least 50% of respondents and all but one were never used by more than 60% of those surveyed. For example, *Promoting Alternative Thinking Strategies* (PATHS) is an intervention that has very strong evidence for its effectiveness and is frequently cited as a model program on numerous research reviews. Yet, in the current study, 60% of psychologists surveyed were not familiar with it. Clearly more professional development and awareness activities are needed to ensure that good, well-researched programs are used.

It is important to note, however, that practitioners should not blindly recommend or purchase a program based solely on its website reviews. Practitioners must consider the program's match to the specific needs of the school and the student population. Schools are very complex organizations, and purchasing a major SEL program may require systemic supports (e.g., staff buy-in, administrator support) that need to be in place to ensure success. Furthermore, the effectiveness research may have been conducted on students whose demographic characteristics are unlike those in a practitioner's school, thus putting into question the match between the program and students. Practitioners are encouraged to thoroughly review program information and take into account the ecology of the school when making decisions about selecting SEL programs.

Selection of Evidence-Based SEL Interventions

Practitioners reported that effectiveness research is the most important factor behind the decision to use a particular program. However, as noted earlier, less than one-third of respondents rely on reading empirical journal articles to learn about the research supporting various programs. It may be the case that practitioners do not have easy access to professional journals, and if they do, minimal time to read them. Fortunately, NASP members have access to *School Psychology Review* and the EBSCO Online Library as ways to access empirical information related to SEL programs. Professional development time could be devoted to reading and reviewing empirical studies so practitioners can engage in discussion about programs and their potential uses.

Time required to implement the program was the second most important factor noted in deciding to use a program. This finding indicates a need to create programs that are not time and resource intensive, especially in terms of personnel and training requirements. Is it possible to have a resource-conservative, yet highly effective SEL program? As programs continue to be developed and investigated, developers should keep decision-making factors examined in this study in mind and attempt to meet the needs practitioners express so that evidence-based SEL programs will actually be implemented well, with integrity and effectiveness. In the meantime, practitioners can continue to rely on colleagues, professional development workshops, and journal articles to make careful decisions about selecting and using evidence-based interventions.

LIMITATIONS AND DIRECTIONS FOR FURTHER RESEARCH

There are several limitations that may impact the interpretation of the findings of this study. First, the study was limited to only NASP members. The use of the NASP membership database may be considered a limitation because not all school psychologists are NASP members. While NASP membership represents approximately 50% of school psychologists nationally (Fagan & Wise, 2007), non-NASP members may have different experiences with evidence-based SEL interventions. However, the NASP database was the most efficient way to sample a large number of school psychologists for the study. Furthermore, based on the demographic data completed by the respondents, it appears the sample was representative of overall NASP membership in terms of geographic representation, years of experience, location of practice, employer, highest degree, psychologist-to-student ratio, and number of buildings served.

A second limitation is that *only* school psychologists were invited to participate in the survey. As

noted in some of the open-ended responses on the survey, it may be the case that school counselors or school social workers are in charge of SEL programming and that they may have better knowledge of the SEL interventions in existence. It is also possible that respondents were less familiar with interventions that were not made for the populations they served. As evidenced in the program descriptions in Appendix B, most of the programs serve elementary-age students. While the majority of respondents to the survey served elementary grades, slightly less than half had high school as all or part of their assignment, potentially impacting their awareness of several of the programs listed.

As with many surveys, the response rate (23.6%) in the present study may be considered a limitation. Care was made to ensure the sample represented a national sample of school psychologists, but it is possible that those who did not return surveys had different experiences with SEL interventions than those who responded. In addition, as some of the open-ended comments noted, some school psychologists still have testing as their primary duty, so they may have chosen not to complete the survey, thus potentially impacting the results.

Next, this study only attempted to measure practitioners' perceived awareness of SEL interventions and not their actual knowledge of program goals, contents, and outcomes. As such, the self-report nature of the survey may not provide accurate representations of how much practitioners actually *know* about specific programs. Future research should consider a more thorough analysis of practitioners' insights about the specifics of SEL programs to gain a perspective about what features of programs practitioners pay attention to and use when making decisions about program implementation.

Finally, it is important to note that this study only included published SEL programs that appeared on at least three popular research synthesis agency websites. Other behavioral intervention strategies exist than those that are published and manualized. Such strategies (e.g., school-wide positive behavior support, contingency management) also have solid research bases and are excellent interventions that are commonly used. However, the purpose of this study was to link school psychologists' knowledge and use of SEL interventions with the EBI movement that seeks to identify and promote only those interventions that have manualized procedures and high quality studies with multiple replications demonstrating effectiveness. In this case, it is evident from the current study that most school psychologists surveyed are not aware of, nor are they using, published evidence-based SEL interventions.

RECOMMENDATIONS FOR SELECTING EVIDENCE-BASED SEL INTERVENTIONS

Given the need for more awareness about SEL interventions, practitioners are encouraged to review the research synthesis organizations used in this study. They are useful not only for describing programs, but also for providing a framework one might use to evaluate programs independently. In addition, practitioners can request specific professional development opportunities related to gathering more information about SEL programs. For example, a group of practitioners might request professional development time to read and discuss journal articles, or they might ask a local organization to invite a speaker about SEL programming for a conference. Finally, practitioners can work with local training programs to learn about interventions and provide opportunities for graduate students to practice and use various programs in applied learning experiences.

CONCLUSIONS

School psychologists are committed to enhancing the social, emotional, behavioral, and academic lives of children. The use of evidence-based SEL interventions is one way to do so. As a field, school psychology has taken important steps to identify the importance of promoting and using evidence-based interventions that have strong research for their effectiveness. While there continues to be controversy about the use of EBIs, especially in terms of the danger of reducing individual decision making and autonomy about interventions, published EBIs may be effective and efficient ways for school psychologists to enhance their roles as interventionists. Now, school psychologists themselves need to take the next stop of actually learning about and using those interventions. School psychologists are in an excellent position of become familiar with the range of interventions available due to their expertise in

research interpretation, behavior, consultation, and intervention development and evaluation. Using this knowledge and expertise to select interventions that have the most likelihood for success with individuals or groups of students will enhance the services that they provide and produce desirable outcomes for the children they serve.

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APPENDIX A

Research Synthesis Websites Consulted for Program Identification

- Blueprints for Violence Prevention: http://www.colorado.edu/cspv/blueprints/
- Collaborative for Academic, Social, and Emotional Learning: http://www.casel.org/
- Office of Juvenile Justice and Delinquency Prevention: http://www.ojjdp.gov/mpg/
- Office of Safe and Drug Free Schools: http://www.ed.gov/admins/lead/safety/exemplary01/exemplary01.pdf
- Substance Abuse and Mental Health Services Administration, National Registry of Evidence-based Programs and Practices: http://nrepp.samhsa.gov/
- What Works Clearinghouse: http://ies.ed.gov/ncee/wwc/

Note. All websites are accurate as of September 28, 2011.

APPENDIX B

List of Intervention Programs on the Survey

Program	Description	Author	Website
Al's Pals	An early childhood intervention program based on a resiliency framework designed to develop personal, emotional, and social skills. Target age: Early childhood	Susan Geller	www.wingspanworks.com
Bully Prevention Program (Olweus)	A comprehensive, school wide program designed for elementary and jr. high students. Primary goals of the program are to reduce and prevent bullying problems among school children and to improve peer relations at school. Target age: Elementary and middle school	Dan Olweus	www.clemson.edu/olweus/
Child Development Project (Caring School Community Program)	A multi faceted school-change program focused on creating caring, supportive learning environments that foster students' sense of belonging and connection to school. Target age: Grades 5-12	Eric Schaps	www.devstu.org/caring-school-community
Good Behavior Game	A classroom management strategy designed to improve aggressive/disruptive classroom behavior and prevent later criminality. Target age: Elementary	Sheppard Kellam	www.hazelden.org
High/Scope Curriculum	Curriculum framework that seeks to contribute to children's intellectual, social, and physical development so they can achieve success and social responsibility in school and life. Target age: Early childhood	Various	www.highscope.org
I Can Problem Solve	A violence prevention program that helps children thinks of nonviolent ways to solve everyday problems. Target age: Preschool to upper elementary	Myrna Shure	www.researchpress.com
Linking the Interests of Families and Teachers (LIFT)	An intervention program that prevents the development of aggression and antisocial behavior. Target age: Grades 1-5	John Reid	www.oslc.org
Lion's Quest	Works with educators, parents, and community members to help adolescents develop social and emotional skills, good citizenship skills, positive character, skills to remain drug free, and the ethic of service to others. Target age: Grades 6-8	Susan Keister	www.lions-quest.org
PeaceBuilders	A school-wide violence prevention program in which staff and students change the school climate to promote prosocial behavior. Target age: Grades K-8	Peace Partners, Inc.	www.peacebuilders.com
Peace Makers	A violence reduction intervention program that reduces physical violence and verbal aggression, and increases positive interpersonal behavior. Target age: Grades 4-8	Jeremy Shapiro	www.applewoodcenters.org
Project ACHIEVE	A program that works to improve school and staff effectiveness and places a particular emphasis on increasing student performance in the areas of social skills/social emotional development, conflict resolution, academic progress, and positive school climate. Target age: Elementary and middle school	Howard Knoff	www.projectachieve.info
Promoting Alternative Thinking Strategies (PATHS)	Curriculum that teaches the five areas of social and emotional development: self-control, emotional understanding, self-esteem, peer relations, and interpersonal problem-solving. Target age: Grades K-6	Carol Kushé, Mark Greenberg	www.channing-bete.com
Responding in Peaceful and Positive Ways (RIPP)	A violence prevention program designed to teach middle school and junior high students conflict resolution strategies. Target age: Grades 6-8	Wendy Northup and Aleta Meyer	www.preventionopportunities.com
Second Step	A violence prevention program that develops social and emotional skills in students. Target age: Grades Pre-K to 9	Committee for Children	www.cfchildren.org
SOAR, The Seattle Social Development Project	A comprehensive program that provides social skills training and promotes positive youth development and academic success. Target age: Grades 1-6	J. David Hawkins	www.channing-bete.com
Social Decision Making/Problem Solving Program	A social-emotional program that trains children in social and decision making skills to handle social and emotional stress in healthy ways. Target age: Grades K-8	Maurice Elias &Linda Bruene Butler	www.umdnj.edu/spsweb

Note. All websites are accurate as of September 28, 2011.

TOC

Establishing Positive Discipline Policies in an Urban Elementary School

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Researchers and school practitioners alike are finding positive outcomes in the proactive practices of schoolwide positive behavior supports (SWPBS). However, reform through such systemic efforts as SWPBS is a challenging endeavor. For SWPBS to reach the widest number of schools, it is necessary to provide school faculty and staff with the knowledge and tools necessary to design and implement effective behavioral supports. *Foundations* is a staff development tool designed to guide school teams through the process of developing positive disciplinary practices consistent to the principles of SWPBS that prevent problem behavior and encourage safety and civility. This paper includes a description of SWPBS and Foundations followed by outcomes from a diverse, urban elementary school. Following one year of implementation, data indicated positive changes in schoolwide behavior and discipline practices.

KEYWORDS: schoolwide positive behavior supports, discipline reform, positive behavior interventions and supports

Successful resolution to changing student needs requires the restructuring of school practices in a manner that consistently and proactively supports positive behavior for all students and in all settings. Schoolwide positive behavior support (SWPBS) is a promising approach for addressing these needs (Netzel & Eber, 2003; Skiba & Peterson, 2000; Turnbull et al., 2002). In implementing SWPBS, school teams restructure their discipline systems to provide universal, targeted, and intensive supports to encourage positive social, emotional, and behavioral growth in all students. Universal supports promote an encouraging school climate whereby all students are actively taught social-behavioral expectations and reinforced for appropriate behavior, supplemental supports are provided at the targeted level for those who are unresponsive to universal supports, and intensive supports are implemented for individual students with chronic levels of challenging behavior. At all levels of prevention and support, local data are utilized to determine student needs and response to interventions (McKevitt & Braaksma, 2008; Sugai & Horner, 2006; Sugai, Horner, & McIntosh, 2008; Walker et al., 1996). Key elements of the SWPBS approach include (a) active teaching and reinforcement of a small number of clearly defined social-behavioral expectations; (b) implementation of consistent consequences for violations of school expectations; and (c) use of school data to drive intervention planning and monitor outcomes (Horner et al., 2004; McKevitt & Braaksma, 2008; Sugai & Horner, 2006). These key features are implemented across the settings that exist in school communities including common areas, instructional settings, and for individual students in need of intensive support (Safran & Oswald, 2003; Turnbull et al., 2002; Walker et al., 1996). Many meaningful outcomes are associated with SWPBS, including reduced rates of office disciplinary referrals, detentions, and suspensions (e.g. Bohanon et al., 2006; Bradshaw, Reinke, Brown, Bevans, & Leaf, 2008; Scott & Barrett, 2004) and increased instructional time (e.g. Lassen, Steele, & Sailor, 2006; Luiselli, Putnam, Handler, & Feinberg, 2005). Overall, there is a substantial and growing body of evidence supporting positive outcomes following the implementation of SWPBS in primary and secondary schools (e.g. Safran & Oswald, 2003; Muscott, Mann, & LeBrun, 2008).

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Yet, creating effective and sustainable change on a systemic level is a difficult and complex undertaking (Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005; Muscott, Mann, & LeBrun, 2008; Tyre, Feuerborn, & Lilly, 2010). This is particularly true for urban schools, as challenges associated with high poverty rates and limited resources often complicate systemic reform efforts. Urban schools often struggle with higher levels of violence, mobility, truancy, under-qualified staff, and staff turnover. Furthermore, staff members are provided limited opportunities for professional development. Thus, school staff in urban communities often struggle to meet the diverse social, emotional, and behavioral needs of their students (Netzel & Eber, 2003). Urban schools may require more intensive levels of supports for students and more comprehensive training and resources for staff than non-urban schools (Warren, Edmonson, Griggs, P., Lassen, McCart, Turnbull, & Sailor, 2003).

Fundamentally, the successful adoption of any systems-level initiative, including SWPBS, requires the support and active participation of stakeholders within the school system to restructure current schoolwide practices. A key component to achieving this support and active participation is to ensure school practitioners have the knowledge and skills necessary for the full implementation of the schoolwide innovation (Ervin & Schaughency, 2008). *Safe & Civil Schools Foundations,* a staff development program grounded in behavioral principles consistent with SWPBS, may offer a means to provide the necessary knowledge and skills for the implementation of effective behavior supports.

Despite the widespread use of *Foundations,* the program's utility has yet to be empirically evaluated. In that *Foundations* comprises the critical features of SWPBS, it is promising that evidence validating the effectiveness of SWPBS may be generalized to support the utility of *Foundations;* however, there is no research available to support this supposition. Therefore, the purpose of this study was to explore student discipline outcomes and levels of SWPBS implementation following one year of implementation of *Foundations* in an urban elementary school. Student discipline data including violations of schoolwide rules, detentions, and suspensions were collected and reviewed prior to implementation and at the end of the first year of implementation. Level of SWPBS implementation was examined at the end of the first year of implementation. It must be noted that the authors conducted this project independently.

There is no relationship or financial interest between the authors and the participating school and the Safe & Civil Schools' company and affiliated programs.

SAFE & CIVIL SCHOOLS FOUNDATIONS

Safe & Civil Schools Foundations (Sprick, Garrison, & Howard, 2002) is a staff development tool that utilizes a series of multimedia presentations to guide school teams through the process of planning for and implementing positive disciplinary practices. Key features of the *Foundations* program consistent with SWPBS include: clear definition, explicit teaching, and reinforcement of desired behaviors; clear definition and consistent consequences for undesired behaviors; and the use of data to drive intervention planning and monitoring of progress across all educational settings.

Reflection, Data, Structure, and Collaboration

Foundations incorporates a staff development model which encourages reflection, data utilization, structure, and collaboration. When faced with a challenging behavioral situation, school staff members are encouraged to use self-reflection to determine how to help the student experience more success in the future. In this manner, staff view challenging behaviors as learning opportunities for both students and staff. Also, school teams collect and evaluate data collected from behavior incident forms or office discipline referrals, school surveys, and common area observations to guide the decision-making process. For example, "Structuring for Success" calls for staff to scrutinize the organization of physical environments via structural blueprints or maps of the school and observation data. Common areas, such as recess grounds and hallways frequently contain areas that are visually obscured and less supervised, and it is in these areas that bullying and harassment are likely to occur. Upon review of such building structures, staff members may consider increasing supervision or remodeling areas such as hidden locker

bays. Lastly, the developers stress the importance of collaboration. In that all school staff are viewed as stakeholders in the program, responsibility for student success is shared by all (Sprick et al., 2002).

Levels of Implementation

Foundations encompasses three tiers of implementation: schoolwide, classroom, and individual. The schoolwide level is the universal level which includes supports for all students in all settings. At the classroom level, supports for positive behavior are embedded into all instructional settings. For students who necessitate more intensive support, individualized supports are provided. The *Foundations* program emphasizes data-based decision making at each level. If, for example, schoolwide data indicate problem behavior occurs in a variety of settings and with a large number of students, intervention at the schoolwide level is necessary. However, if instructional settings are the foremost settings in which behavior problems transpire, then teams are advised to implement improved classroom supports (Sprick et al., 2002).

The Cycle of Improvement

Foundations offers a problem-solving model built around a continuous improvement cycle that incorporates the following steps: review, prioritize, revise, adopt, and implement. During the review step, the team collects and analyzes data from multiple sources (e.g. surveys, direct observations, office referrals, attendance records, and suspension records). Through a review of these data, school personnel identify procedures and policies that are successful and those needing improvement. During the prioritize step, improvement priorities are established through majority agreement among staff, as well as any issues warranting immediate action. After priorities have been established, the team advances to the revise step wherein it develops proposals for addressing the priorities. In the adoption phase, the completed proposal is presented to the entire staff, who then votes to adopt or reject the proposal. If a proposal is rejected, then the team gathers staff feedback to build an alternative proposal. If on the other hand, the proposal is adopted, the process advances to the implementation step. During the implementation step, adopted policies and procedures are enacted. The team is encouraged to celebrate new adoptions with the staff (Sprick et al., 2002).

METHOD

Participating School

This case study took place in an urban elementary school in Western Washington. There were 389 students enrolled in kindergarten through fifth grade. The student population consisted of 40% Latino, 21% Caucasian, 13% African-American, 7% Asian, 6% Pacific Islander, and 2% American Indian students. Of the total school population, 58% were male, 76% received free or reduced lunch, 31% were recorded as transitional bilingual, and 18% received special education services. There were 25 classroom teachers with an average of 10.5 years of experience.

This school struggled with issues often associated with urban schools, such as low resources and high staff turnover. The school did not have an assistant principal. Staff reported low levels of parental involvement in the school, and support personnel, including the school psychologist, were stretched thin providing services to several schools. Many staff members were concerned with circumstances in students' home lives such as incarceration, homelessness, and drug abuse. They worried they lacked the training to deal with such issues, and due to budget restrictions, were provided sparse opportunities for professional development.

Procedures

The following activities occurred during the spring of the pre-implementation year and the year of implementation.

Determining need, establishing a team, and planning. The impetus for implementing *Foundations* began with the school principal. In previous years, she noted increasing student behavioral difficulties across all grades and received feedback that the school staff was expending a considerable amount of instructional time dealing with inappropriate behaviors. This administrator recognized the need for improvement in discipline. She was familiar with the several programs published by Safe & Civil School and believed the *Foundations* program to be the most effective yet least resource-intensive means to meet the needs of students in the school. In the spring prior to the year of implementation, the principal described *Foundations* at a staff meeting and then established staff support through a vote. Following an overwhelmingly supportive vote by the staff, nine individuals volunteered to form a leadership team which consisted of a special education teacher, a counselor, four primary teachers, one intermediate teacher, an office manager, and a paraprofessional. The chair of this team was a special education teacher.

Soon thereafter, the team administered anonymous school climate surveys included in the *Foundations* materials to all school staff and students in grades two through five. The team then used the results of the surveys to assist in assessing school needs and guiding the planning process. The team met for two hours, once a week for four consecutive weeks during the summer. During these meetings, the team entered and analyzed survey and office discipline data and planned for implementation in the fall. The greater part of the team's planning activities focused on areas of concern as identified via staff and student surveys, specifically clarity of behavior expectations in common areas, such as the playground, cafeteria, and restrooms. To increase clarity of expectations, the team developed signs that contained the schoolwide and setting-specific expectations and created lesson plans to teach students the schoolwide expectations as defined in the specific settings.

Throughout the following school year, the team met biweekly for one hour. During the meetings, the team typically reviewed progress, viewed and discussed the modules, analyzed data, and planned for next steps. The building principal attended approximately one-third of the meetings.

Defining and teaching behavioral expectations. During a staff retreat just prior to the start of the school year, the team provided a reintroduction to the behavioral support principles as outlined in *Foundations* for the staff. Since staff is crucial to the implementation of any school-wide reform effort, it was important to re-affirm its commitment preceding the first year of implementation. Thus, staff voted again and demonstrated support the program. This additional vote in the fall also provided an opportunity for any new staff to vote on the implementation of the program. The team then presented the results of the student and staff surveys, celebrated areas of strength, and discussed areas in need of improvement. During this retreat, staff worked in groups to develop schoolwide expectations or "Guidelines for Success." At the start of the school year, parents, students, and staff voted to select the guidelines they believed most represented the culture and values of the school. The resultant guidelines were: Be Respectful, Responsible, Honest, and Safe. The school then developed posters for the school hallways and classrooms and designed bookmarks and stickers printed with these guidelines.

Once the guidelines were established and clearly defined, the leadership team implemented an October "kick-off" school assembly. During this assembly, all students were formally introduced to the guidelines, and staff performed behavioral teaching skits. Staff defined and demonstrated respectful, responsible, honest, and safe behaviors in the cafeteria, on the playground, in the restrooms, and in the bus waiting area. Following this kick-off assembly, follow-up assemblies were held once a month for four months; one guideline was re-taught during each assembly. To further define respect, responsibility, honesty and safety in all settings and to facilitate the teaching of these behavior expectations, the staff developed behavioral rubrics during staff meetings and the team developed binders that included sample lesson plans and activities for each guideline.

Encouraging appropriate behavior. To encourage behaviors consistent with the school guidelines, staff provided students with "Nice Going" paper slips when they demonstrated expected behaviors. The school guidelines were printed on each paper slip and staff wrote a brief description of the appropriate

behavior they observed. Staff maintained records of the number of slips distributed and to whom. Teachers developed individual classroom goals for the number of slips the class needed in order to earn classwide reinforcement. Once a classroom criterion was met, the class received a classwide reward such as special lunches from nutrition services, reading activity days, pajama days, and game time. In addition to classwide rewards, staff developed schoolwide rewards. All staff reported every 25 slips distributed, and once the school reached a total of 500 slips, all students earned a schoolwide reward such as a creative dress day.

Measures

The following measures were utilized to assess the level of SWPBS implementation and student outcomes in the participating school.

Fidelity of implementation. The Benchmarks of Quality (BoQ) tool was administered at the end of the first year of implementation to assess fidelity in the implementation of SWPBS. The BoQ is a 53-item rating scale that includes ten subscales: SWPBS team, Faculty Commitment, Effective Discipline Procedures, Data Entry, Expectations and Rules, Reward System, Lesson Plan, Implementation Plan, Crisis Plan, and Evaluation (Kincaid, Childs, & George, 2005). The BoQ has strong internal consistency, test-retest reliability, and interrater reliability. Further, the BoQ has been demonstrated to have concurrent validity when compared to the School Evaluation Tool (SET). Based on comparisons of results from the BoQ and SET in Florida and Maryland schools, a score of 70% on the BoQ is recommended as the criterion score for implementation fidelity (Cohen, Kincaid, & Childs, 2007). Administration of the BoQ requires gathering ratings from each leadership team member and the team leader. During an interview with the team leader, the Coach Scoring Form was completed. Independently and anonymously, team members of the SWPBS planning team completed the Team Member Rating forms by rating each item as "in place," "needs improvement," or "not in place." The data gathered from these ratings were compiled to obtain the percentage of implementation of the core features of SWPBS.

Behavioral violations. Rates of Unacceptable Behavior Slips (UBS) were tracked before and during implementation. The participating school utilized UBS as a means for addressing violations of schoolwide rules. When a staff member observed a serious violation of a pre-defined schoolwide rule (e.g. harassment, physical aggression), staff issued a UBS, applied a consequence, and informed the student's family of the incident. Unlike office disciplinary referrals, not all UBS resulted in a visit with the office administration. Rather, some UBS resulted in a conference with a member of the teaching staff who then reported the violation to the office administration on a standard form for data tracking. The leadership team, along with the staff, established decision rules to ensure consistency across staff. For example, the first UBS within a grading period resulted in a teacher-student conference, parent contact, and loss of one recess. In contrast, upon the fourth UBS issued within a grading period, numerous actions would have occurred, including a principal-student conference, school detention, a family support team meeting, and the development of a behavior management plan. UBS decision rules and procedures remained unchanged throughout the duration of this study.

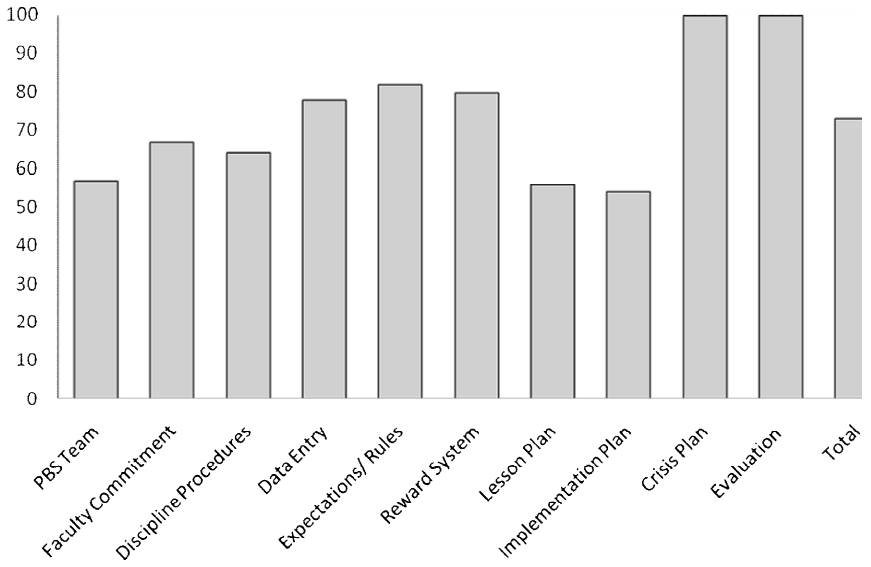
Detentions and suspensions. School detentions were tracked before and during implementation. Staff defined detentions as the annual number of behavioral violations that were serious enough (e.g. four UBS issued within one grading period) to warrant the issuance of a school detention to a student. A school detention required the student to report to the school office before or after school for 20 minutes, during which time the student was placed in a side room and directed to work quietly on his or her schoolwork.

Also, rates of in-school and out-of-school suspensions were tracked before and during the intervention period. Staff defined in-school suspensions as the annual number of students who engaged in a behavior violation or a series of behavioral violations serious enough to result in the exclusion of a student from his or her assigned classroom for one or more school days. Staff defined out-of-school suspensions as the annual number of students who engaged in a behavioral violation or a series of behavioral violations serious enough to warrant exclusion from the school grounds for one or more school day.

RESULTS

Fidelity of implementation. The BoQ was administered at the end of the first year of implementation to assess the level of implementation of the core features of SWPBS (see Figure 1). These results support that the school reached the overall 70% criterion level recommended for implementation fidelity. BoQ results revealed the school staff had implemented 73% of the key elements of SWPBS following the first year of implementation. The independent ratings from the team members revealed similar results; however, the ratings from the team leader resulted in slightly lower levels of implementation in all domains. Therefore, the reported results were based upon the more conservative range of ratings obtained by a detailed interview with the team leader.

Figure 1: *Results of the Benchmarks of Quality (BofQ) by domain and overall following one year of implementation*



At the subscale level, implementation exceeded the 70% criterion level in the following areas: Data Entry, Evaluation, Expectations and Rules, Reward System, and Crisis Plan. The SWPBS plan included an explicit plan for compiling and analyzing data to inform the decision-making process and evaluation of overall outcomes of the initiative. Staff developed clearly defined behavioral expectations, posted these expectations throughout the school, and explicitly taught the expectations to students. Moreover, the staff linked behavioral expectations to the schoolwide system of rewards and identified clear procedures for responding to crisis situations.

However, several subscales fell below the 70% criterion level, including the following: SWPBS team, Faculty Commitment, Effective Discipline Procedures, Lesson Plans, and Implementation Plan. While the team did have the support and active involvement of the school principal, she was only able to attend approximately a third of the team meetings. Also, the school staff demonstrated its commitment to the initiative through numerous staff votes; however, the team did not regularly share schoolwide data with the entire school staff. While the staff explicitly defined effective discipline procedures, it did not develop procedures for a wide array of potential student behaviors and some definitions were unclear. While the plan included explicit lesson plans and behavioral rubrics for teaching expectations schoolwide, these lessons were not consistently embedded into subject area curriculum or communicated to families. The schoolwide implementation plan included explicit training for staff, but the training lacked several components, including a description of how data would be used to guide intervention and directions for embedding behavioral lessons into daily curriculum. Finally, the team implemented

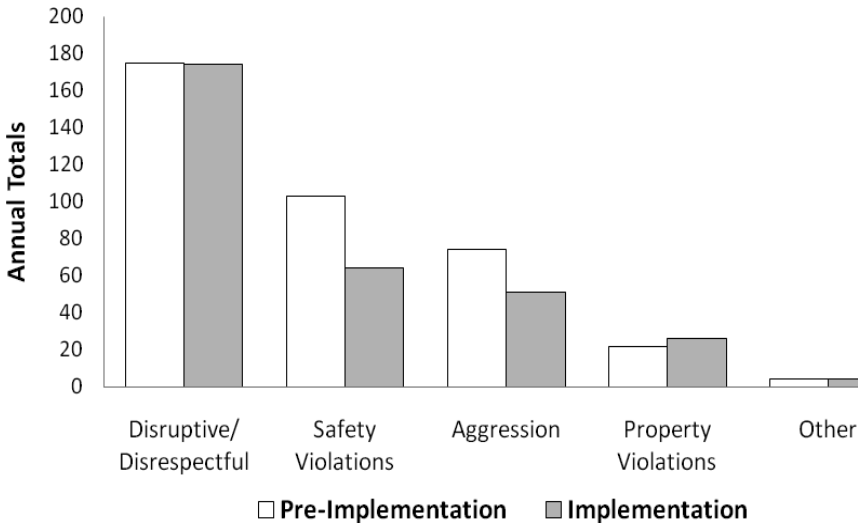
booster sessions or follow-up lessons for reviewing behavioral expectations for students, but failed to offer ongoing opportunities for professional development.

Behavioral violations. During the baseline year, staff issued 378 UBS to students for violations of schoolwide disciplinary rules. Given 180 instructional days in the school year, there was an average of 2.1 UBS issued per day. With a study body comprised of 400 students, there were 94.5 violations of schoolwide rules per 100 students enrolled in the school during the baseline year.

During the first year of implementation, staff issued 303 UBS to students for violations of rules, or 1.7 UBS issued per instructional day. With school enrollment at 389 students during the implementation year, there were 77.9 violations of schoolwide rules per 100 students enrolled in the school. Overall, there was a 20% reduction in the number of UBS issued to students for rule violations during the first year of implementation.

These data were disaggregated to explore the nature of problem behavior resulting in a UBS before and during the implementation year (see Figure 2).

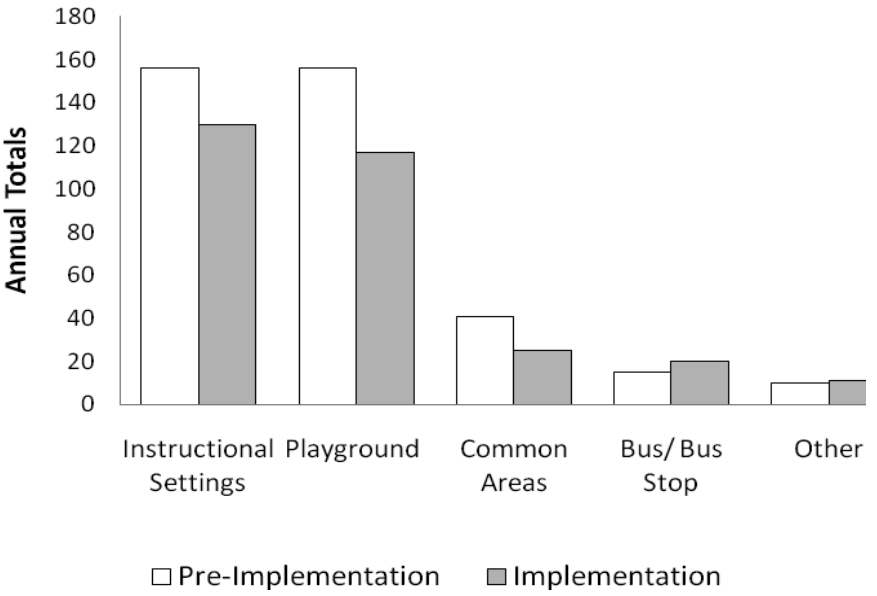
Figure 2: *Annual behavioral violations before and during implementation.*



Our data analysis revealed that 55% of UBS issued during the implementation year involved disruptive or disrespectful behavior such as defiance/insubordination, disruptive conduct, and inappropriate language. Rates of UBS issued for disruptive and disrespectful behavior remained stable from the baseline (n= 175) to implementation years (n= 174). Safety violations such as dangerous behavior, weapons, explosives, and arson accounted for 20% of UBS issued to students during the implementation year. However, there was a 38% decrease in UBS issued for safety violations from the baseline (n= 103) to implementation years (n= 64). It is noteworthy that UBS issued for safety violations involving weapons, explosives, and arson decreased from nine in the baseline year to one during the implementation year. Physical and verbal aggression such as fighting, harassment, and intimidation accounted for 16% of UBS issued during the implementation year. There was a 31% decrease in UBS issued for student aggression from the baseline (n=74) to implementation (n=51) phases. The remaining behavioral violations such as property violations, violations of dress code, and inappropriate displays of affection accounted for less than 10% of all behavioral violations combined.

These data were further disaggregated to explore the locations in the school where UBS were issued before and during the implementation year (see Figure 3).

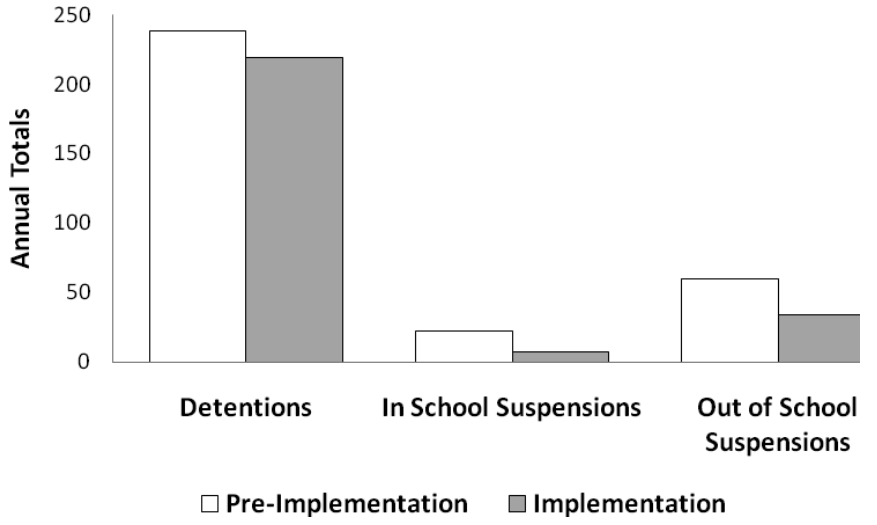
Figure 3: *Locations of behavioral violations before and during implementation*



This analysis revealed that 43% of UBS were issued to students in instructional settings such as classrooms, music, library, and gym. There was a 17% decrease in rates of UBS issued in instructional settings from the baseline (n= 156) to implementation (n= 130) phases. The playground and school grounds were the locations for 39% of UBS issued to students. There was a 25% decrease in rates of UBS issued on the playground from the baseline (n=156) to implementation (n= 117) years. Common areas within the school building such as lunchroom, hallways, and restrooms where the settings for 8% of UBS. There was a 39% decrease in UBS issued in common areas from the baseline (n=41) to implementation (n=25) phases. The remaining locations (e.g. bus, bus stop, office, off campus) combined accounted for approximately 10% of all UBS issued during the implementation phase.

Detentions and suspensions. During the baseline year, staff issued 238 student detentions (see Figure 4).

Figure 4: *Annual detentions and suspensions before and during implementation*



During the implementation year, staff issued 219 detentions. The change from the baseline to implementation years amounted to an 8% annual reduction in the number of student detentions.

During the baseline year, staff issued 22 in-school suspensions (see Figure 4). During the implementation year, staff issued seven in-school suspensions. The change from the baseline to implementation phases amounted to a 68% annual reduction in the number of in-school suspensions.

During the baseline year, staff issued 60 out-of-school suspensions (see Figure 4). During the implementation year, staff issued 34 out-of-school suspensions. The change from the baseline to implementation years amounted to a 43% reduction in annual totals of out of school suspensions.

DISCUSSION

The purpose of this study was to explore student discipline outcomes and levels of SWPBS implementation following one year of implementation of *Foundations* in an urban elementary school. Student discipline data including violations of schoolwide rules, detentions, and suspensions were reviewed prior to implementation and at the end of the first year of implementation. Additionally, level of SWPBS implementation was examined at the end of the first year of implementation.

While additional research is needed to verify these results in other schools using *Foundations,* this study does provide preliminary evidence that *Foundations* may be an effective staff development tool leading to the implementation of SWPBS, as measured by the BoQ after one year of implementation. It is important to note that results of the BoQ revealed several domains of implementation that were in need of improvement, which provides useful information for the team as they work to improve implementation.

A comparison of student discipline data before and after one year of implementation revealed positive changes in schoolwide disciplinary data after only one year of using *Foundations* to guide their planning and implementation of positive discipline practices. Of course, this exploratory study necessitates caution in making any causal attributions related to these results. However, the results are helpful in assessing positive change over time and the need for continued improvement in specific areas. Analysis of data revealed an overall 20% reduction in UBS issued for behavioral violations. When considering the types of UBS issued for behavior violations occurring in the school, there were decreasing trends for safety violations, verbal aggression, and physical aggression. However, UBS issued for behavioral violations involving disruptive and disrespectful behavior remained steady, suggesting a need to explicitly teach expectations related to respect and the identification of specific students in need of targeted or intensive supports in this area. When considering the locations where behavior violations occurred, decreasing trends in instructional settings, the playground, and common areas were noted. However, the vast majority of behavioral violations continue to occur in classrooms and on the playground, suggesting a need to target these areas for explicit teaching and reinforcement of behavioral expectations.

Finally, decreases in rates of student suspensions and detentions were observed. These results support the findings from UBS data which revealed decreasing rates of serious behavioral violations such as safety and aggression that tend to result in suspension or detention. Decreases in suspensions may be particularly notable as declining suspensions are associated with increased instructional time in the classroom.

The non-experimental design of this study warrants caution in interpretation and prevents affirmation of causal attributions. Although the school administrator reported that no other schoolwide initiatives were implemented during the period of the study and the implementation activities occurred as a result of *Foundations,* the extent that the positive results of the present study could have been influenced by other changes in the school is an unknown. Because the level of implementation was not assessed the year prior to implementation, it is possible that some of the features of implementation were present prior to implementation. It is also possible that an awareness training on issues of poverty that occurred during the year prior to implementation could have produced some of the measured changes in student

outcomes and disciplinary practices. Additionally, latent effects of instructional changes such as a switch to standards-based assessments in the year prior to implementation could have influenced the measured outcomes. Finally, it is important to note that schoolwide systems change is a long-term process that requires extensive staff commitment overtime to attain sustainability through institutionalization of SWPBS systems (Sugai & Horner, 2006; Sugai, et al., 2008). This study reported results following only one year of implementation of SWPBS as guided by *Foundations*. Therefore, the results are at best considered preliminary.

The potential for *Foundations* to provide access to the knowledge and skills necessary to effectively implement SWPBS in the absence of substantial outside technical assistance is perhaps the greatest potential asset of *Foundations.* This school struggled with high rates of staff turnover and a dearth of resources for professional development and support personnel. If this staff development tool proves to result in fidelity of implementation and positive student outcomes in the absence of such resource-intensive outside supports, SWPBS could be brought to scale in urban schools as well as isolated schools that otherwise would not have access to an outside behavioral consultant or coach.

While it incorporates different terminology, e.g. Guidelines for Success versus schoolwide expectations, *Foundations* is largely consistent with the philosophy and key components of SWPBS. However, the training modules primarily emphasize the universal system level. While individualized student supports are addressed, they are addressed to a lesser extent than universal system supports. Additionally, the modules minimally address targeted supports for groups of students at risk for chronic behavioral challenges. As a result, it may be possible schools using *Foundations* neglect to provide adequate supports at these system levels, which are critical features of the SWPBS approach. Indeed, like many urban schools, many staff members of the participating school reported significant social, emotional, and behavioral student and family needs. It is likely that the staff at this school will need to establish additional school- and community-based supports for students and families with more significant needs.

Consistent with the SWPBS emphasis on data-based decision making, *Foundations* encourages teams to gather data from staff, students, and parents. It was observed that the team in the participating school experienced difficulty gathering, compiling, entering these data into a computer program for analysis. Indeed, some SWPBS teams may require additional supports to effectively gather and integrate data from multiple sources to make decisions (Scott & Martinek, 2007).

Rather than a linear progression, SWPBS is based on a continuous cycle wherein the needs of a school and its stakeholders drive the nature and direction of change. *Foundations* acknowledges and reinforces this notion in initial portions of the staff training program via the discussion of the Improvement Cycle. It is clearly noted that school teams should determine their unique needs, allowing those needs to determine where they proceed within the training modules. However, the participating team had a propensity to view the modules, labeled one through three, as a linear program or curriculum. Hence, school teams may be apt to proceed through the modules in numerical order, rather than choosing sections based on the needs of their school.

Similar to many other SWPBS studies, the results of this study support that implementation fidelity and positive student outcomes are possible following one year of implementation. However, this study adds to the current literature base by offering promising preliminary evidence to support *Foundations* as a staff development tool that guides school-based teams through the problem solving process necessary to effectively develop and implement positive discipline practices that are aligned with the values and unique needs of each school.

Clearly, there is a need for further research related to *Foundations.* In general, more research is needed to determine if implementation of *Foundations* results in positive outcomes for students and a high level of SWPBS implementation fidelity over time. Considering the increasingly widespread implementation of this program, rigorous, experimental evaluations are highly needed. Specifically,

research incorporating randomized groups including (a) comparisons with schools serving as controls, (b) comparisons between schools using Foundations with and without access to coaching or external expertise, and (c) comparisons of outcomes overtime from schools implementing SWPBS with and without the use of *Foundations* would contribute to our current knowledge base.

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Helping Female Juveniles Improve their On-task Behavior and Academic Performance Using a Self-Management Procedure in a Correctional Facility

Stacy Caldwell, PhD, & Laurice M. Joseph, PhD
The Ohio State University

The purpose of this study was to teach female juvenile offenders with disabilities a self-management procedure to help improve on-task behavior and academic performance during independent practice of math calculation facts. Students were taught to set goals and were provided with incentives for goal attainment. A reversal single-case design (ABABC) was used to evaluate the effectiveness of the self-management procedure for on-task behavior (time on-task), academic productivity (percentage of problems completed), and academic accuracy (percentage of problems completed correctly). The results indicated that the intervention was effective for increasing participants' on-task behavior. A modest-to-moderate impact was evident on these students' academic accuracy and productivity. Limitations of this study and future directions for research are addressed. In addition, practical suggestions are offered for helping students monitor their on-task behavior, accuracy, and productivity.

KEYWORDS: Self-management strategies, female juveniles, serious emotional disturbance, on-task behaviors, and math skills

The number of females served by the juvenile justice system has been increasing since the 1960s, and more girls are entering the system at younger ages (Gavazzi, 2006; Poe-Yamagata & Butts, 1996; OJJDP, 1998a; Siegel & Senna, 2000). A female is more likely to engage in delinquent activity when few protective factors exist and when multiple risk factors are severe, frequent, and occur early in a youth's development. These risk factors might include (a) being raised in an impoverished environment, (b) being raised in a high crime neighborhood, (c) being identified as part of an ethnic minority group, (d) having a history of aversive educational experiences or low achievement, (e) being a victim of any form of abuse, (f) reporting a sense of discouragement and hopelessness, (g) having a history of alcohol and other drug abuse, and (h) having limited access to necessary medical and mental health treatment (OJJDP, 1998b). Other risk factors include (a) early onset of disruptive behavior in school, (b) expulsions, (c) frequent school changes or absences, and (d) minimal involvement in extra-curricular activities (Mullis et al., 2004). Moreover, when comparing female to male juvenile offenders, females juvenile offenders have spent less time in school, have greater academic delays, and are less prepared for job acquisition than male offenders (Timmons-Mitchell et al., 1997).

The prevalence of disabilities as defined by the Individuals with Disabilities Education Improvement Act (IDEIA, 2004) is higher for youth in the juvenile justice system than youth in the general population (Gresham, Lane, & Lambros, 2000). According to Quinn, Rutherford, Leone, Osher, & Poirier (2005), approximately half of the juveniles with disabilities have been identified with emotional disturbance under IDEIA. Students with emotional disturbance have significant difficulty managing their own behaviors such as attending to instruction, completing assigned tasks (Cancio et al., 2004) and using appropriate strategies to resolve interpersonal conflict (Reid, Gonzalez, Nordness, Trout, & Epstein, 2004).

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Howell and Wolford (2002) suggested using behavior modification and self-management strategies to help students with disabilities in juvenile justice settings. Self-management interventions teach students to apply behavior change strategies in order to notice, evaluate, and independently direct their behavior (Dollard, Christensen, Colucci, & Epanchin 1996) with the goal of becoming more productive and improving or eliminating target behaviors that are already within a student's repertoire (Reid, 1993).

Whereas the application of self-management strategies addressing behavior and mental health problems have been suggested within juvenile correctional settings (Houchins, 2001), only one study examined the effects of a self-management intervention in a correctional school setting (i.e., Marshall & Heward, 1979). Specifically, Marshall and Heward (1979) taught self-management strategies to adjudicated boys who were being educated in a juvenile reformatory in order to address their rehabilitation needs. In this study, eight male students were asked to choose a behavior that was personally relevant for meeting the goals of their rehabilitation program (e.g., writing letters to request job applications and interviews). A self-management intervention that included 13 lessons on topics such as defining, measuring, recording, and graphing target behaviors was implemented to help the youth achieve their self-selected behavioral goals. The results indicated that participants, in general, were able to successfully exhibit positive behaviors to meet their goals.

Although studies involving school-based, self-management interventions have not been conducted in juvenile correctional schools in at least the past 30 years, there have been some studies that have examined the effects of self-management strategies for students with emotional and behavioral disorders in typical public school settings (see Mooney, Ryan, Uhing, Reid and Epstein, 2005 for a review). In general, positive findings were reported in those studies. For instance, Levendoski and Cartledge (2000) studied the effects of a self-monitoring procedure on time, on-task and academic performance of one third-, one fifth-, and two fourth-grade boys with emotional and behavioral disorders. They used a reversal design with a fading condition (A-B-A-B-C) to investigate the effects of a self-monitoring procedure on these students' daily practice of math calculation problems following teacher-directed math instruction. The daily math practice consisted of giving the students 20 minutes to complete worksheets containing math problems at their instructional level. They were also asked to use self-monitoring cards at 10-minute intervals while they completed the worksheets. The self-monitoring cards contained the question, "At this exact second, am I doing my work?" Students checked a box to indicate a response of "yes" or "no" when a bell sounded during the 10-minute intervals. Their findings indicated that all students increased time on-task, and three students increased their accuracy levels on math problems.

There were no studies that explored the use of self-management procedures for improving behaviors and academic performance for girls in a juvenile correctional setting. Therefore, clearly, there is a need to examine the effectiveness of self-management strategies on desired academic and behavioral outcomes for females in juvenile correctional classroom settings.

The purpose of our study was to explore the effects of a self-monitoring procedure on the on-task behaviors and the academic performance of high school females who were placed at a juvenile correctional school and were diagnosed with mental health disabilities (based on Diagnostic and Statistical Manual for Mental Disorders – Fourth Edition – Text Revision (DSM-IV-TR) criteria) and disabilities defined by the Individuals with Disabilities Education Improvement Act (IDEIA 2004). We sought to replicate the work of Levendoski and Cartledge (2000) in several ways. Similar to their study, we also included students with emotional and behavioral disorders. However, in our study, we focused on all females as opposed to males, on high school students rather than elementary students, and on students placed in a juvenile correctional facility rather than those receiving special education services in a public school classroom. We used self-monitoring cards that were similar to those used in Levendoski and Cartledge's (2000) study. However, the students were also encouraged to reflect on and record how they felt each day and whether they were encountering any particular distractions. Our study also used a reversal (A-B-A-B-C) single-case design to study the effects of students' use of self-monitoring cards on their on-task, accuracy, and productivity behaviors while they completed math worksheets. Unlike Levendoski

and Cartledge's (2000) study, we did not focus on newly learned material, and students did not receive assistance while they worked independently. However, we included goal setting, performance feedback, and reinforcement.

The following research questions guided our study:

1. What effects did a self-management intervention have on the participants' percentage of time on-task, math problems completed and math problems completed accurately during independent practice with math facts?
2. What effects did a self-management intervention have on participants' percentage of time on-task, math problems completed and math problems completed accurately during independent practice with math facts after the intervention was faded?

METHOD

Setting and Participants

The study took place at a maximum-security juvenile facility in a large metropolitan city in the Midwestern region of the United States. The following are criteria we used to select students for participation in this study: (a) students who had been placed in the correctional facility for at least three months (b) students who had a disability identified through IDEIA or the DSM-IV-TR, (c) students who exhibited frequent off-task behaviors as reported by their teachers, and, (d) students who were performing below the mean or two or more grade levels below their current grade placement in math based on the Woodcock-Johnson-Third Edition (WJ-III) Math Calculation subtest standard score. We were able to obtain permission for three participants who met the selection criteria.

Student A was a 17-year-old Hispanic/Latino American female. According to the DSM–IV-TR she was diagnosed with Conduct Disorder, Bipolar Disorder without psychotic features, ADHD, Cannabis Abuse, and Alcohol Abuse. Student B was an 18-year-old European-American female. According to the DSM-IV-TR, she was diagnosed with Mood Disorder (Not Otherwise Specified), Polysubstance Dependence, and Conduct Disorder. Student C was a 14-year-old African-American/Biracial female. Student C was identified with Emotional Disturbance according to IDEIA (2004) and diagnosed with Major Depressive Disorder (Recurrent), Post-traumatic Stress Disorder, Conduct Disorder, and ADHD according to the DSM-IV-TR. Participants were all taking psychotropic medications at the time of the study. Their performance on the WJ-III indicated that math calculation skills were below the norm sample's mean score (student A standard score = 84; student B standard score = 84; student C standard score = 91). For Student B, experimental procedures were carried out in a treatment group room on her living unit. For Students A and C, the experimental procedures were conducted in a classroom setting where they were seated at a table facing a wall and at other times on their living units in a treatment group room. In the group room, students were seated at a table positioned in the center of the room.

Dependent Variables

The dependent variables for this study were percentage of time on-task, academic productivity, and academic accuracy during independent math practice. Time on-task was defined as student engagement with the activity, which meant: (a) looking at the math worksheet or self-monitoring card, (b) calculating problems (writing) on the math worksheet or a scrap piece of paper, (c) writing responses to math problems, (d) recording an appropriate response on the self-monitoring card after an audible cue (i.e., a timer with a short bell alarm that signaled students to self-record performance for the 'on-task question') and /or (e) "thinking," that is, looking away from the paper but appeared to be thinking. Any observation of "thinking" was coded as on-task for up to two consecutive intervals. If this behavior occurred beyond two consecutive intervals, it was coded as off-task. Two intervals of "thinking" behavior had to be followed by an interval of another type of on-task behavior before "thinking" could be coded as on-task again. Using an adaptation of the *Behavior Observation of Students in Schools* (*BOSS*; Shapiro, 2004),

students were observed during completion of math worksheets for all sessions across all experimental phases. A momentary time sampling observation method was utilized, whereby the 16-minute time period was divided into a series of 15-second intervals (i.e., total = 64 intervals). Observers recorded whether on-task behavior was occurring at the end of each interval. Specifically, experimenters listened to prerecorded cues and coded behavior on the observation sheet each time an interval number was spoken (e.g. "observe 17"). The percentage of time that a student was on-task was recorded and this was calculated by totaling the number of intervals coded as on-task, dividing that number by the total number of observation intervals (i.e., 64) and multiplying the result by 100.

Academic productivity was defined as the percentage of math problems completed. All items that students attempted, whether accurate or not, were counted in the 'completed' total. Academic accuracy was defined as the number of math problems completed correctly. Math worksheets were graded against an answer sheet containing correct answers. Students' answers had to match those given on the answer sheet to be counted as correct.

Experimental Design and Procedures

In this study, a single–case reversal design, A-B-A-B-C (Cooper, Heron, & Heward, 2007) was implemented to examine intervention effects across participants. The experimental conditions consisted of a Baseline Phase I (A), Self-Monitoring Intervention Phase I (B), Return to Baseline Phase II (A), Self-Monitoring Intervention Phase II (B), and a Fading Phase (C). The fading condition involved withdrawal of intervention components such as the self-monitoring card, self-graphing, and goal setting.

Baseline Phase I: Initial Baseline

During the initial baseline phase, students were given a packet containing 140 math problems that were distributed across several math worksheets. Students were presented with math problems at their instructional level. The following instructions were provided as students were given the packet of math worksheets: "We would like for you to complete some math problems. Please try to focus on the math worksheet as you complete the problems. You should continue to work on the math worksheet until one of the adults in the classroom asks you to stop working. When we pass out the worksheets, don't turn them over until we ask you to start working. This is an independent work time, you will not receive assistance, just try your best."

Students were asked to stop working after 16 minutes, and the worksheets were collected. The experimenter and assistants graded the math worksheets and recorded the number of problems completed (i.e., productivity) and the number of correct responses (i.e., accuracy) on the top page of each packet. It should be noted that the experimenter was only given a 16-minute time frame to work with the students. For each student, the decision to move from the first baseline phase to the first intervention phase was based on the percentage of on-task behavior. When a participant showed a stable trend, a declining trend, or persistent variability in the data pattern, she was moved from baseline to intervention.

Pre-intervention Training

After the first baseline phase ended, the experimenter, a middle-aged female school psychologist, provided one training session consisting of lessons on how to self-monitor on-task behavior, graph performance for math productivity and accuracy, and set goals. Instructional strategies were adapted from the Self-Regulated Strategy Development (SRSD; Graham, Harris, & Mason, 2005) approach to train students to self-monitor on-task behavior. They involved the following stages: (a) Background Knowledge, (b) Discussion, (c) Modeling, (d) Learning and Memorization, (e) Collaborative Practice, and (f) Independent Practice. In the Learning and Memorization stage, they were asked to memorize the acronym KIT that was placed on a flip chart and consisted of the following self statements: **K**eep working on the assignment, **I**gnore distractions, (the) **T** means "Am I on-task?"

Next, the following procedures for using the self-monitoring card were introduced: (a) The experimenter discussed the first section of the card that dealt with helping students compartmentalize their personal concerns in order to focus on their work. Students were trained to circle a "yes" or a "no" on the card as to whether they wanted to discuss their concerns with the school psychologist at a later time; (b) Students recorded their feelings by circling one of the listed descriptors on the card; (c) On the second section of the card, students listened for a bell tone that was emitted from an electronic device and circled a "yes" if they were on-task or a "no" if they were off-task below the correct tone number (e.g., at tone 1, circle 'yes' or 'no' in the correct box for tone 1); (d) The experimenter demonstrated use of the card while verbalizing the process out loud; (e) Students role-played using the self-monitoring card while the experimenter provided guidance and feedback; and (f) Students practiced the use of the strategy independently. After the 30-minute training session, students were given a modified version of the *Choice Reinforcement Survey* (Northup, George, Jones, Broussard, & Vollmer, 1996), which included items the students were permitted to have within the facility. These were made available during the intervention phases of the study.

Intervention Phase I: Self-Monitoring

First, students were shown their math worksheet packets from the last baseline session, and they were provided with feedback on their math performance (e.g., shown errors, the number of problems completed, and the number of problems correct). Next, graph pages were given to the students. Students were asked to graph their performance data (i.e., data on academic productivity and accuracy) from the worksheet packet they just reviewed and then set and record personal productivity and accuracy goals for the current session at the bottom of the graph page. The following instructions were provided: "Please graph your performance from the last math practice session. The number complete and the number correct are written on the top page of the packet. Now set your goal for today. Do you want to increase the number of problems you complete or complete at least the same number of problems? Do you want to increase the number you get correct or keep this number at least the same? Please write the date and your goal on the chart at the bottom of the page."

After students completed this step, self-monitoring cards were distributed. Self-monitoring cards consisted of 8.5" X 11" pieces of paper divided into two sections (see Figure 1). The first section included a space for students to answer three questions and to indicate whether they made a decision to set aside any personal concerns that might affect their focus on the class activity. The second section included a chart with the question, "At this exact second, am I on-task?" The chart was divided into four segments with the words "yes" and "no" in each segment, which allowed students to respond each time an audible tone occurred (i.e., one tone every four minutes). A definition of on-task behavior was written at the bottom of the self-monitoring card as an additional cue for students to remain on-task.

Specifically, students were provided with the following instructions: "Sometimes students come to class thinking about problems they have or things that happened before class. When you get to school, it is important to push those problems, worries or concerns out of your mind so that you can focus on your schoolwork and reach your educational goals. Putting our problems aside in this way is called "compartmentalizing." In the first box, please indicate whether you have compartmentalized your concerns. Please circle "Yes," "No," or "No problems today." If you circled "Yes" (you have set aside concerns) or "No" (you are having a hard time pushing concerns out of your mind) you can answer the next question in this box to tell whether you would like to meet with the school psychologist later to talk about your problems or concerns. If you say "Yes," you will be given time to meet with the school psychologist later. Next, I'd like you to tell how you feel today, circle one option from each line."

Figure 1: *Self-Monitoring Card*

Student Name

Did I Compartmentalize My Issues or Concerns?	**YES NO No problems today**
Would you like to talk to the school psychologist about your concerns later?	**YES NO**
How I feel today (circle one from each line)	**TIRED ALERT** **Good/ Happy / OK/ Sad/Angry/ Don't Know/ Frustrated/ Other**

	Tone 1	Tone 2	Tone 3	Tone 4
At this exact second, am I on-task?	**Yes No**	**Yes No**	**Yes No**	**Yes No**

On-Task means
- **My eyes are on the worksheet, or**
- **I am working on a math problem, or**
- **I am circling "yes" or "no" on the self-monitoring card**

Next, students were given instructions for completing the second section of the self-monitoring card for on-task behavior. Math worksheets were then distributed. The following instructions were provided: "While you are working on the math worksheets, you will hear a tone every four minutes. When you hear the tone, ask yourself, 'At this exact second, am I on-task?' if you are on-task, circle 'yes' and if you are not on-task, circle 'no.' Be very careful to circle your responses under the correct tone number (e.g., at tone 1, circle 'yes' or 'no' in the correct box for tone 1). Your card has reminders of what actions count as on-task behavior. Remember, it's important that you are accurate when you circle 'yes' or 'no'. [Math worksheets were distributed.] Please wait until I say, 'start.' You will not be able to receive help with the math problems, just do your best. You can have scratch paper to work problems. You can start working now".

Students were asked to stop working after 16 minutes, and the worksheets were collected. The experimenter and assistants graded the math worksheets and recorded the number of problems completed (i.e., productivity) and the number of correct responses (i.e., accuracy) on the top page of each packet. If students maintained or improved academic productivity and accuracy during subsequent session(s), they were allowed to choose an incentive of their preference from a set of available options based on the modified survey form. Incentives were provided approximately every other session.

For each student, the decision to move from the first intervention phase to the second baseline phase was based on the student's percentage of on-task behavior. Students were moved to the next phase when the data revealed a median value that was higher than the median point value of the preceding baseline condition.

Baseline Phase II: Return to Baseline

This phase consisted of the same procedures as those described in the initial baseline phase.

Intervention Phase II: Return to Self-Monitoring

Prior to starting this phase, students were provided with a booster training in use of the self-monitoring card. In this phase, the same procedures described in intervention phase I were implemented.

Fading Phase

The fading phase was implemented for six sessions. During sessions 1 and 2, the tone was used in the same manner as in the intervention phases for students to self-monitor their on-task behavior. Students did not use self-monitoring cards, but they were instructed to ask themselves if they were working when the tone occurred. Performance data from the previous session was provided to the students. The following instructions were given as individual graph pages were distributed: "This graph shows your performance from the last practice session. Please look at the number of math problems you completed and the number of problems you got correct. Now, think about your goals for today using the same questions we have discussed before." Afterwards, graph pages were collected.

The experimenter then provided the following instructions, "Today, just as in the other days, please set aside any problems or concerns you may be thinking about in order to focus on the assignment. If you have concerns I can address those with you after the session. You will hear the same tone as you work on the math worksheets. When you hear the tone this time, I want you to ask yourself if you are working but you will not have to circle your response on the self-monitoring card. If you need scratch paper, please let me know. You can start working now." At the end of the 16-minute practice period, the experimenter collected the worksheets and recorded performance data on the graph pages.

During sessions 3 and 4, the tone was eliminated, and students were asked to give the experimenter a report regarding their on-task behavior at the end of the work period. The following instructions were given as individual graph pages were distributed: "This graph shows your performance from the last practice session. Please look at the number of math problems you completed and the number of problems that were correct. Now, think about your goals for today using the same questions we have discussed before." The graph pages were then collected.

The experimenter provided the following instructions, "Today, just as in the other days, please set aside any problems or concerns you may be thinking about in order to focus on the assignment. If you have concerns I can address those with you after the session. You will not hear a tone as you work today. When you finish working, I will ask you to tell me if you were on-task or off-task most of the time. If you need scratch paper to help with working the math problems, please let me know. You can start working now." After the practice period, the experimenter collected the worksheets and recorded performance data on the graph pages.

During sessions 5 and 6, the tone was not provided and students were not asked to set aside concerns or report their on-task behavior to the experimenter. The following instructions were provided as individual graph pages were distributed: "This graph shows your performance from the last practice session. Please look at the number of math problems you completed and the number of problems that were correct. Now, think about your goals for today using the same questions we have discussed before." Afterwards, the graph pages were collected.

Then, the experimenter provided the following instructions, "Today, you will complete the math assignment just as you have on other days. You will not need to complete any other steps. When you finish working I will collect the assignment. If you need scratch paper to help with working the math problems, please let me know. You can start working now." The experimenter collected the worksheets and recorded performance data on the graph pages.

Interobserver agreement

An undergraduate student in psychology served as the independent observer who graded 100% of the math worksheets using an answer key for scoring productivity and accuracy of math problems across all students and all experimental conditions. Interobserver agreement (IOA) on academic productivity across all students ranged from 97% to 100% for baseline I, ranged from 86% to 100% for intervention I, ranged from 96% to 100% for baseline II, ranged from 91% to 100% for intervention II, and ranged from 89% to 100% for fading. On academic accuracy across all students, IOA ranged from 79% to 100% for baseline I, ranged from 92% to 100% for intervention I, ranged from 96% to 100% for baseline II, ranged from 90% to 100% for intervention II and ranged from 74% to 100% for fading. It should be noted that for 93% of the worksheets, there was 90% or higher agreement for academic accuracy. In some instances 100% agreement between raters' scores was not achieved due to difficulty with distinguishing students' print.

Procedural Integrity

Using a checklist consisting of all steps required to carry out the intervention, procedural integrity checks of the experimenter's adherence to implementing the intervention procedures were conducted by an independent observer who was an intervention specialist employed at the school. The experimenter was responsible for introducing each session, providing students with feedback on their performance (e.g., academic productivity and accuracy of math problems), administering incentives when indicated, and guiding students with goal setting. Percentage of intervention steps were observed for 25% of all the intervention sessions, and procedural integrity ranged from 91% to 100%. As students became very familiar with the procedures, the experimenter eliminated part of the instructions, thus, resulting in less than 100% integrity in some instances.

The experimenter conducted procedural integrity on the students' implementation of the self-monitoring card using a checklist containing a space to place a checkmark as to whether the student completed the following steps: (a) Student reviews the graph page and records a productivity goal and an accuracy goal on the graph page, (b) Student responds to the first three questions on the self-monitoring card, "Did I compartmentalize my (nonacademic) concerns or worries?", "I would like to talk to the school psychologist later about my concerns later?", and "How I feel today?", (c) Student begins to work on the math calculation worksheet when the experimenter asked student(s) to start, (d) Student responds to the second question on the self-monitoring card which is "At this exact second, am I on-task?", each time the auditory cue occurred, and (d) Student stops working on the math worksheets when the experimenter asked her to stop?

For student A, procedural integrity checks were completed across 72% of all intervention sessions, and adherence ranged from 60% to 100%. For Student B, procedural integrity checks were completed across 66% of all intervention sessions, and adherence ranged from 60% to 100%. For Student C procedural integrity checks were completed across 50% of all intervention sessions, and adherence ranged from 80% to 100%. Adherence was not consistently at 100% because students did not always adhere to some of the steps. For instance, at times, they failed to respond in writing to the on-task question when all four auditory tones were emitted (e.g., they sometimes responded to 3 of 4 cues).

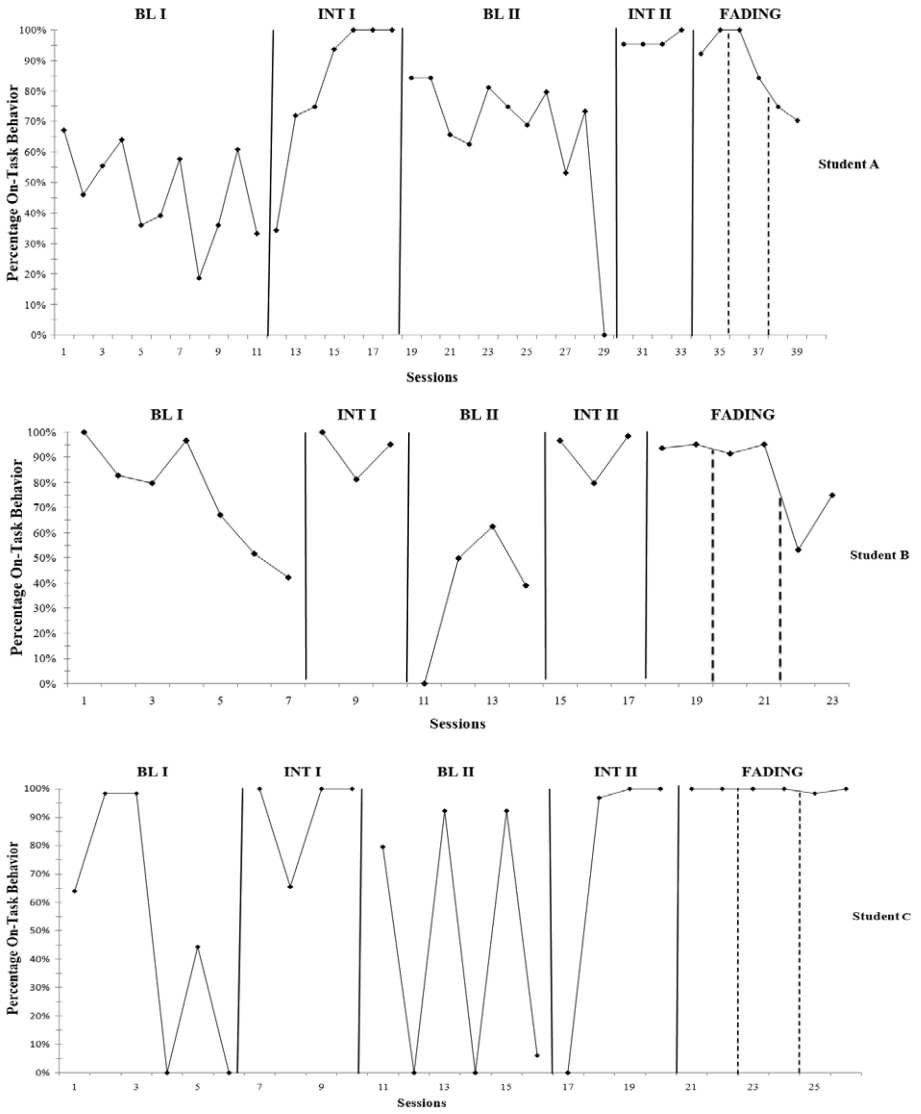
RESULTS

On-Task Behavior

Figure 2 presents a graphic display of students' percentage of on-task behavior across all experimental phases. During baseline 1, on-task behavior was highly varied (student A range = 18.75% to 67.18% with a median of 46%; student B range = 42% to 100% with a median of 79%; student C range = 0% to 98.43% with a median of 54%). During the first intervention phase, their on-task behaviors improved (student A range = from 34.37% to 100% with a median of 93%; student B = 81% to 100% with a median

of 95%; student C = 65% to 100% with a median of 100%). During the return to baseline phases, all students exhibited high variability of on-task behaviors (student A range = 0% to 84.37% with a median of 73%, student B range = 0% to 62% with a median of 79%; student C range = 0% to 92% with a median of 43%). During intervention II phase, student A and student B's on-task behavior was stable (student A range = 95.31% to 100% with median of 95% and student B range = 79% to 98% with median of 96%). During intervention II phase, student C's on-task behavior varied initially ranging from 0% to 100% with median of 98%. During the first session of intervention II, she exhibited 0% of on-task behavior, however, by the second session, she exhibited 96% of on-task behavior and this remained stable throughout this condition.

Figure 2: *Percentage of On-Task Behavior Across Phases*



During the fading phase, on-task behavior decreased initially for students A and B (student A range = 70.31% to 100% with a median of 92% and student B range = 53% to 95% with a median of 93%). During the fading phase, student C's on-task behavior was maintained (range = 98% to 100% with a median of 100%).

Percentage of nonoverlapping data points (PND) were calculated by totaling the number of data points in the intervention phase that fell above the highest data point in the preceding baseline phase, dividing that total by the number of data points in the intervention phase, and multiplying the outcome by 100 (Scruggs & Mastropieri, 2001). Interventions are considered effective if the PND range is from 70% to 100% (Scruggs & Mastropieri, 2001). PND for on-task-behavior was 85% for student A, 0% for student B, and 75% for student C between the first baseline and first intervention phases. PNDs between the second baseline and second intervention phases were 100% for students A and B and 75% for student C.

PNDs for on-task-behavior were 0% between the first baseline and first intervention phases and 100% between the second baseline and intervention phases for student B. The reason for overlapping data between baseline 1 and intervention 1 was due to her high on-task behavior in the first four sessions of baseline 1. During instances where there was overlap between baseline 1 and intervention1 phases, the on-task behavior of both students B and C may have been influenced by the novelty of the task. However, their motivation seemed to diminish for completing math worksheets as percentages of on-task behavior decreased in the baseline 1 phase.

Accuracy and Productivity

Ranges and mean percentages of all participants' productivity and accuracy levels are presented in Table 1. Student A's productivity level and accuracy level remained fairly stable during intervention II and fading phases with the exception of one session during intervention II where she completed a high percentage of math problems. Student B and student C's productivity were highest during intervention II and fading phases. As their on-task behavior improved so did their productivity levels, particularly during the fading phase. Although student B and student C completed more math problems during intervention II and fading phases as compared to their productivity levels in the other phases, accuracy levels did not increase as expected. For all students, productivity and accuracy were more stable at the end of intervention II and remained stable during fading phases.

Table 1: *Mean Percent of Students' Productivity and Accuracy on Math Problems by Experimental Condition*

	Student A				Student B				Student C			
	Productivity		Accuracy		Productivity		Accuracy		Productivity		Accuracy	
Condition	Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range
BL 1	58	39-88	59	44-70	64	53-76	50	33-86	17	0-24	69	0-82
INT 1	56	47-64	59	47-74	66	52-75	47	42-49	38	15-61	40	35-62
BL 2	52	0-67	60	0-79	55	0-61	47	0-55	32	0-47	37	0-42
INT 2	75	67-93	56	50-60	70	59-84	53	48-56	49	0-50	37	0-41
FADE	64	56-67	58	54-63	76	66-97	48	41-50	66	49-83	42	37-54

Note: BL1 = Baseline I; INT1 = Intervention I, BL2 = Baseline II; INT2 = Intervention II, and FADE = fading.

Social Validity

To assess acceptability of the self-monitoring intervention, social validity surveys were given to all three participants. The surveys consisted of 12 statements and a seven point Likert scale (0 = totally wrong, 1 = a lot wrong, 2 = a little bit wrong, 3 = not right or wrong, 4 = a little bit right, 5 = a lot right, and 6 = totally right). The following are examples of statements that were included on the survey: (a) the

self-monitoring cards were easy to use, (b) the auditory cue helped me focus and reminded me to stay on-task, (c) the self-monitoring strategy was distracting or hard to use, and (d) now I have more confidence in my math calculation skills.Responses varied within and across students on survey items as there were some aspects of the self-monitoring intervention that these students found acceptable and other aspects they found unacceptable. For instance, student A found the audio tone to be distracting, and she did not feel she had more confidence in her math skills.

DISCUSSION

The female juvenile offenders in this study learned how to use a self-monitoring strategy to manage their on-task behavior. Similar to the Levendoski and Cartledge's (2000) study, the current findings revealed that students' on-task behaviors reflected high variability during the baseline phases, and students' on-task behaviors generally increased during the self-monitoring intervention phases. With regard to productivity and accuracy, the current findings were not consistent with Levendoski and Cartledge's (2000) findings. In their study, the self-monitoring intervention resulted in a substantial increase in the percentage of math problems completed correctly for three of the four participants (the group average was 26% during baseline and 78% for self-monitoring phases); whereas, in the current study, student accuracy levels did not increase from baseline phases to intervention phases. This finding from the current study was also inconsistent with results from other studies that showed students with emotional and behavior disorders improved substantially on their academic accuracy levels (Carr & Punzo, 1993; Lazarus, 1993; Lloyd, Bateman, Landrum, & Hallahan, 1989). Levendoski and Cartledge (2000) directly taught math problems that were new to the students, however, direct instruction on math problems were not provided in the current study. Rather, in the current study, students were given math practice exercises to complete, and some corrective feedback was offered. In addition to the corrective feedback they received, students in this study may have benefitted from direct instruction on how to solve the math problems.

Limitations

There were several limitations in the current study. First and foremost, the sample size was small and, therefore, findings cannot be generalized to the population of female juvenile delinquents. It was a challenge to recruit more participants due to instances such as release dates from the facility and the reduction in the number and type of youth that would be assigned to the correctional facility. Secondly, the high school setting in this study was in a correctional facility that had a positive behavior support system in place. The results of this study may not generalize to a similar sample of students attending a facility with no positive behavior support system in place.

A third limitation pertained to decisions regarding transition between phases. Perhaps movement from baseline phases to intervention phases could have occurred sooner. We wanted to establish trends in baseline performance after novelty effects wore off.

Another limitation was that the delivery of incentives was provided approximately every other session during intervention phases and not immediately. The students in this study had a very positive regard for incentives and probably needed more immediate incentives in order to maintain interest in the tasks. Incorrect responses on math problems should have been re-taught to the students to ensure they knew how to perform the operations.

DIRECTIONS FOR FUTURE RESEARCH

Researchers may consider having students complete academic tasks that contain a mixture of mastered items with newly learned items. Participants may be more motivated to complete tasks that mix previously mastered items with new items as they perceived these tasks requiring less effort (Billington & Skinner, 2006). Because there were some inconsistencies in this study between the participants' on-task behavior and performance on math worksheets, researchers may consider having students not

only self-monitor their on-task behavior but also self-monitor their academic performance similar to the way Harris, Friedlander, Saddler, Frizzelle, and Graham (2005) compared self-management of attention (SMA) with self-management of performance (SMP) among students diagnosed with ADHD. Researchers may analyze the components of the intervention to determine which components are the most salient features with regard to student outcomes. For instance, researchers might consider varying the intervention and fading procedures, such as maintaining an auditory tone for more than two days and perhaps increasing the length of time between tones from four to eight minutes and using an auditory tone at random intervals, for example, 3 minutes, 8 minutes, and 6 minutes.

Having students identify academic or behavioral skill targets may be implemented in future studies to determine if self-selection of target behaviors will lead to increases in on-task behavior and academic performance.

IMPLICATIONS FOR SCHOOL PSYCHOLOGISTS

School psychologists working with students with emotional disturbance in public school settings or alternative educational settings need to keep in mind that any intervention may be challenging to implement given characteristics unique to this population (e.g., long history of behavior problems and detachment from school). The findings of this study and similar studies show that students with challenging behavior problems can be taught to self-monitor their behavior. The materials and training procedures used to carry out this self-monitoring intervention are easy and low cost to develop and implement in practice. The intervention is feasible and can be implemented in practice if school psychologists collaborate with teachers or support staff to share in the design, implementation, and evaluation of the intervention. Collaboration of this nature is especially critical in settings where there is a potential for unexpected highly disruptive behaviors and low base rates of compliance. Some of the challenges associated with educating students with emotional and behavior problems may be mitigated before and during the implementation of interventions if school practitioners establish and maintain positive rapport with students.

In general, participants in the current study were observed to respond favorably to setting goals and receiving incentives or tangible reinforcers while self-managing their behavior. Therefore, practitioners may consider including those components when implementing a self-management intervention in the classroom.

This study showed that components of the intervention could be faded as students maintained appropriate levels of targeted behaviors and/or academic performance. Careful progress monitoring will permit school psychologists and other staff to determine the rate at which intervention components should be faded.

CONCLUSION

The findings from this study imply that secondary level students with significant behavior concerns may respond favorably to self-management strategy training. Interventions such as this are likely to create opportunities for educational success. Students who experience academic success are likely to develop positive attitudes and maintain motivation for learning.

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TOC

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Optimizing Home-School Collaboration: Strategies for School Psychologists and Latino Parent Involvement for Positive Mental Health Outcomes

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Private Practice

Public schools across the United States are experiencing an increase in Cultural and Linguistically Diverse (CLD) students, particularly those of Latino descent. Latino children are at a high-risk for mental health problems (i.e., depression, anxiety, risk of suicide, etc.) and face greater risk factors when compared to many of their ethnic counterparts. School psychologists are in a unique position to support their mental health needs. However, in order to enhance mental health outcomes, home-school collaboration becomes fundamental, particularly when working with Latino families. This article will examine Latino parent definitions and educator expectations of parental involvement in school systems. Home-school collaborative inhibitors (barriers), as perceived by Latino parents, will be examined and discussed. Epstein's *Framework of Six Types of Involvement* will be adopted as an outline for fostering and sustaining home-school collaboration and overcoming identified inhibitors. Culturally and linguistically appropriate strategies based on Epstein's framework will be examined. Implications for school psychologist and educators will be discussed.

KEYWORDS: Cultural and linguistic diversity (CLD), home-school collaboration, mental health, Latino, parental involvement, familismo, respeto, confianza, problem-solving model, ethnic validity, ecological perspective.

Public School Demographics

Public schools across the United States are becoming increasingly more diverse. The U.S. Department of Education, National Center for Education Statistics (NCES, 2008) reported that 49,293,000 children were enrolled in public schools (K-12) in 2007. Of this total, 43% were of Culturally and Linguistically Diverse (CLD) backgrounds. In 2006 students enrolled in K-12 schools were identified in the following manner: 57% were non-Hispanic White, 19% were Hispanic/Latino, 16% were non-Hispanic Black, and 4% were Asian and Pacific Islander (NCES). In like manner, English Language Learners (ELLs) are becoming more common in public school systems. In 2002, 8% of all public school children were labeled ELLs (Capps et al., 2005). The top five languages spoken, by percentage, in the United States are: Spanish (79.2%), Vietnamese (2%), Hmong (1.6%), Cantonese (1%), and Korean (1%) (Kindler, 2005). Garcia and Cuellar (2006) estimated that 53% of all immigrant students were of Chicano/Latino ethnic decent. At the present time, the United States is at its most diverse point in all of its history.

Mental Health Issues in Diverse Populations

Prevalence rates of Latinos with psychiatric/mental health issues are estimated to be at 28.1% for men and 30.2% for women (Alegria et al. 2007). In a national cross-sectional study consisting of children in grades 6 to 10 (average ages 11 to 15), 22% of Latinos endorsed depressive symptoms compared to 18% of all participants in the study which included African-Americans, Caucasians, American-Indians,

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and Asian-Americans (Saluja, Iachan, Sheidt, Overpeck, Sun, & Giedd, 2004). Latinos reported higher symptoms of depression across all ethnic groups except for American-Indians, which stood at 29% (Saluja, Iachan, et al., 2004). The effects of mental illness can have a negative impact on the academic success of students in general. However, Latinos are at even greater risk for negative academic impact or poor academic success. For example, in a national sample study of 2,532 CLD young adults ages 21 to 29 diagnosed with a mental health disorder, Latinos had an increased risk of dropping out of school as compared to non-Latino White students (Porche, Fortuna, Lin, & Alegria, 2011). Furthermore, in addition to negative academic impact, suicidality among Latinos has been identified as a significant concern. O'Donnel, O'Donnel, Wardlaw, and Stueve (2004) reported risk factors for suicide/suicide ideation among Latino and African-American children included depression, being female, having unmet basic needs, and engaging in same gender sexual relations.

In addition, Latino children tend to be at a higher risk for anxiety disorders in comparison to peers from other ethnicities. When compared to other ethnicities (Caucasian and African-American), Latino children (ages 2-4) tend to manifest higher levels of internalizing behaviors (i.e., anxiety), as reported by parents/caregivers on the Child Behavior Checklist (Achenbach and Recorla, 2000). Mclaughlin et al. (2007) found that Latino adolescents reported higher levels of worry and separation anxiety than their Caucasian counterparts. Latinas reported higher levels of social anxiety and physical symptoms of anxiety when compared to females of other ethnicities (Chorpita et al. 1997).

According to the Latino Consortium of the Academy of Pediatrics Center for Child Health Research, limited access to mental health care, including dental and medical services, for Latino children has been considered to be "the most important and urgent priorities and unanswered questions in Latino child health" (Flores et al., 2002, p. 82). This disparity has created a gap in student access to needed resources for school-aged children. Given this urgency, school psychologists, as school-based mental health providers, are in a position to serve as a vital link between schools, homes, and mental health agencies as experts in school-based collaboration.

Risk Factors

Latino youth must overcome significant risk factors. In 2002, the poverty rate for Latinos was 21.8% compared to 12.1% for all ethnicities and 7.8% for non-Latino whites (Ramirez & De la Cruz, 2003). When considering Latino children (ages 0-17), the percentage of those living at the poverty line increases to 33.2% (Pearl, 2011).

In addition, Latinos are at greater risk for dropping out of school. The high school dropout rate for Latinos, as a whole, stood at 38% in 2008. However, for Mexican-American and Central-Americans, the percentage increases to 45% (U.S. Department of Commerce, Bureau of the Census, 2009, Table 9). Dropping out of high school leads to less educated workers in the labor force, lower wages, increased crime, poorer health, and decreased political participation (Rumberger & Rodriguez, 2011). Exposure to violence is higher in homes from immigrant backgrounds (Latino, Somali, and Vietnamese) and Latinos experience three times more violence than their Caucasian counterparts (Pan et al., 2006).

Collaboration

Defining Collaboration. Outcomes are most successful when families and schools work together toward a common goal. When examining the interface of families and educational systems, the praxis of collaboration becomes "one of building and sustaining connections for these systems to support and maximize the learning potential of children" (Elser, Godber, & Christianson, 2008, p. 917). It is only when families and educators join together that an environment can be created for problem solving to occur, and in turn, the students' probability of succeeding increase. Collaboration becomes increasingly important when mental health problems are impeding academic and social emotional progress.

More specifically, collaborative efforts within school systems involve teams composed of parents, teachers, administrators, counselors/mental health professionals, and school psychologists. These

educational teams work together to problem solve and jointly develop possible solutions. It can involve resolving behavioral, emotional, academic, or systemic issues that educators may encounter. This role can also take place within Response to Intervention (RtI) structures. According to Vaughn and Bos (2012), collaboration within an RtI framework includes the following:

- determining and implementing research-based practices;
- collecting and using ongoing data to make effective decisions for students with learning and behavior problems;
- identifying appropriate practices for differentiating instruction within the classroom and interventions; and
- communicating effectively with all key stakeholders so that appropriate instruction is provided to all students with learning and behavior [emotional] problems (p.128).

School psychologists can take a leadership role throughout the collaborative processes particularly as it relates to enhancing mental health outcomes. Because school psychologists are trained to work with families and teachers, they can take the primary role in selecting, implementing, and evaluating evidenced-based interventions at the individual, group, and systemic level. Lastly, school psychologists are trained to communicate and consult with all stakeholders both within and outside educational systems with the underlying goal of facilitating success for students.

Collaboration and Mental Health. Collaborative efforts among schools, families, and mental health professionals have been shown to enhance both academic and mental health outcomes. Collaboration among mental health providers, families, and schools for urban-minority children's efforts resulted in the reduction of mental health symptoms of the children being treated (Mckay, Gopalan, Franco, Kalogerogiannis, Umpierre, Olshtain-Mann, Bannon, Elwyn & Goldstein, 2010). School and family collaboration (e.g., communication, positive interactions, parent support groups, English Language classes, etc.) has been shown to have a positive effect on the mental health and adjustment of immigrant children (Suarez-Orozco, Onaga, & Lardemelle, 2010). Families and Schools Together (FAST) is a collaboration model that targets children ages 5 to 12 who are at risk of behavioral maladjustment. According to Ackley and Cullen (2010), FAST was shown to enhance family relationships, reduce family stress, and decreased school failure. For further discussion on family and school partnerships the reader is directed to the *Handbook on Family and Community Engagement* (Redding, Murphy, and Sheley, 2011).

When considering Latino families that are afflicted by mental health problems, collaborative alliances with educational and community mental health providers have resulted in a reduction of family stress (Garcia & Lindgren, 2009). *Familismo* (family-centered) in mental health contexts refers to family support and shared decision making when working with professionals. Ayon, Marsiglia, and Bermudez-Parsai (2010) additionally concluded that this construct, when used in treatment or intervention development, has promising outcomes of reducing barriers to accessing and working with mental health providers. In this context, encouraging family involvement and shared decision making may have a positive impact on enhancing collaborative efforts between homes and schools.

Latino Parental Involvement

Perspectives of Latino Involvement. Although there is an overabundance of research to support the positive effect that home-school collaboration has on mental health outcomes, educators continue to report low parental involvement, particularly from low-income Latino homes (Fuller & Olson, 1988; O'Donnel, Kirkner, & Meyer-Adams, 2008). This reported lack of parental involvement is often perceived as an indifference toward their child's academic success (Badillo, 2006). In many instances, this perception may frustrate educators when attempting to initiate home-school collaborative relationships, particularly when socio-emotional behaviors are of concern. Yet, a review of the literature suggests just the opposite is true. Other researchers also demonstrate that ways in which Latino parents care about their children's

academic success (Fuligni, 2007; Goldenberg, Gallimore, Reese, & Garnier, 2001; Ryan, Casas, Kelley-Vance, Ryalls, & Nero, 2010; Valencia, 2011). Given this apparent cultural misunderstanding, examining Latino parental attitudes and expectations regarding involvement in their children's educational may serve to bring the gap closer together.

Zarate (2007) at The Tomás Rivera Policy Institute (TRPI), a project based out of the University of Southern California (USC), undertook a comprehensive study to understand Latino parental involvement in the educational system. The study reviewed two factors: (a) Latino middle and high school parental definitions of involvement; and (b) educators' expectations of parental involvement/commitments in schools. The Latino families were recruited from the Los Angeles, New York, and Miami areas. The participants included first and second generation parents. The author found that the participants in the study defined parental involvement as performing the following actions:

> *Attend parent-teacher conferences; sign homework as required by teacher; know when to expect report cards; ask about homework daily; listen to the child read; visit classroom during open houses; ask friends, siblings, and other family members for homework help for the child; have high standards for academic performance; purchase materials required for class; drive them to tutoring and school activities; go to the library with them; be present when required to pick up report cards at school (p. 8).*

Zarate concluded that "Latino parents equate involvement in their child's education *with involvement in their lives:* participation in their children's lives ensures that their formal schooling is complemented with guidance taught in their home" (p. 9). This study provided a compelling perspective that Latino parents perceive that they are involved and supportive of their children's education. In sum, Latino parental involvement can be conceived as providing the support structures for their children to be become *"bien educados"* (well-educated/well-mannered/well-behaved). The concept of *bien educados* encompasses schooling, and to a higher degree, developing a good citizen with positive character traits (Valdez, 1996); the end result being a successful and honest contributing member of society. According to Valdez (1996), this type of home support can seem "invisible" to school staff yet important to the overall success of student achievement. Furthermore, Latino parents see themselves primarily supplementing and supporting the school's educational efforts in the home environment.

Educators' Expectations of Parental Involvement. Additionally, Zarate (2007) interviewed teachers, counselors, and school administrators in order to understand their expectations of Latino parents and their involvement in their children's education. There were four broad themes as defined by Zarate:

1. *School Leadership* - participation in school committees, PTA membership, student advocacy, community activism.
2. *Administrative Support* - sewing curtains for a classroom, hosting luncheons for faculty, fundraising, monitoring the gate, preparing food for the event.
3. *Parenting* - monitoring attendance, controlling kids/behavior monitoring, emotional support, authoritative parenting, offering entertainment as a reward and incentive.
4. A*cademic Support* - Helping with homework, reviewing report cards, making sure student completed homework, observing class, seeking tutoring for their children, and staying on top of academic progress (p. 11).

Though there are shared perspectives regarding parental involvement, particularly with regard to *Academic Support* (i.e., seeking tutoring, homework support, reviewing academic progress and report cards, etc.), some incongruities were obvious which are helpful for school psychologists to be aware. While educators overwhelmingly expected parents to be actively and physically involved on school campus (i.e., committees, participation, fundraising, etc.), Latino parents see themselves as involved in their children's education within the home environment. This gap in expectations may give the perception that Latino parents are not involved and thus do not care about their children's education.

Home-School Collaboration

Inhibitors of the Home-School Collaborative Effort. An obvious gap between Latino parental definitions of school involvement and educators' expectations continues to persist. Bridging this gap becomes more crucial when a child has mental health problems. Particularly in these cases, this expectation of parental involvement on campus is increased. Parents of children with mental health needs are expected on the school campus in the form of collaborative meetings (i.e., Individual Education Program, Students Support Meetings, parent informational meetings, teacher meetings, etc.).

Researchers (Waterman & Harry, 2008; Zarate, 2007) have investigated inhibiters that impede on-campus Latino parental participation and can be classified according to the following themes (see Table 1):

Table 1: *Home-School Collaborative Inhibitors*

Identified Inhibitor	Description
Having access to the means and opportunity for parent-school collaboration	Lack of school-based initiative efforts that value collaboration and relationships (e.g., PTA, parent-teacher conferences, etc.)
Language and access to effective opportunities	Lack of school-based personnel that speak the parent's language. This may impact understanding, communication, and relationship building. Documents must also be available in the parents' language.
Lack of access to comprehensible information about U.S. school systems and culturally and linguistically diverse families	Migrated parents that have been educated in another country may not know the educational system of the U.S. This may impact how they understand grades, parent-teacher meetings, grade standards, Special Education, etc.
Special education and disability issues	Migrated families may have different views of disabilities that might differ from mainstream views. Views may be impacted by religion, superstition, and tradition.
Immigrant Isolation	Migrated families may experience isolation from members of their ethnicity. This isolation may create feelings of loneliness and impede home-school collaboration.
Undocumented legal status	Families that have been unable to attain legal status may be afraid to become involved physically in school systems.
Work demands	Many parents, particularly of low SES, work multiple jobs or non-traditional shifts (i.e., swing and graveyard) and may not be able to participate during school hours. Others may fear losing their jobs due to inflexibility (i.e., the need to take time off might settle well with the supervisor or boss).
School-Home Communication	School communication (i.e., automated services, flyers, infrequency, online, etc.) can be perceived as impersonal.
School Policies	Certain school policies may discourage parental participation (i.e., metal detectors, locked gates, barriers in reaching teachers).

The inhibitors listed in Table 1 can serve as a starting point for school psychologists if low levels of Latino parental involvement impact their school. Non-threatening parent surveys can be conducted to gather data as to why parents are not physically active in the school community. The California School Parent Survey (CSPS) published by WestEd, a companion tool to the California Healthy Kids Survey (CHKS) and the California School Climate Survey (CSFS), provides a non-threatening means of gathering data from parents as to their perceptions of the overall atmosphere of learning, parental involvement, and student achievement. In addition to Spanish, the CSPS is available in 26 languages. While this type of data is very informative and helpful, it must be taken into consideration that surveys may be fraught with various challenges including technical language, answering codes, time requirements, and literacy levels. School psychologists, as school-based experts in collaborative efforts, are in a position to identify possible inhibitors that exist within their school environment in order to facilitate home-school collaboration.

Strategies for School Psychologists

Ecological Perspective and Ethnic Validity. Before discussing collaborative strategies that can be used with Latino families, undertaking an *ecological perspective* and *ethnic validity* becomes part of the decision-making process. Considering these factors becomes increasingly important when working with Latino families who have children with mental health needs. The *ecological perspective* involves examining the student within the context of a complex interactive system (Bronfenbrenner, 1979). Contrast to the traditional view of individual deficits, the environmental context is evaluated to determine how the environment impacts the student. Within an *ecological perspective*, the school psychologist will consider all factors that facilitate and encourage home-school collaboration and mental health intervention development. Factors to consider when working with CLD families include, but are not limited to, culture and linguistic factors within the home, childrearing practices, familial acculturation, experiences with discrimination, behavioral norms, social economic status, and educational history (Rathvon, 2008). Considering these factors will assist the school psychologist to gain a better understanding of the student's culture and family aspects.

Once all relevant ecological factors have been considered, *ethnic validity* must be used as a tool in selecting a culturally and ethnically appropriate collaborative strategy. Rathvon (2008) defines *ethnic validity* as "the degree to which interventions, goals, assistance processes, and outcomes are acceptable to intervention recipients and stakeholders with respect to their cultural/ethnic beliefs and value systems" (p. 37). The ethnic validity model as conceptualized by Barnett et al., (1995) considers three key criteria: (a) *Problem solving*, (b) *Intervention acceptance*, and (c) *Teaming*.

The first step in the *ethnic validity* model involves using the *problem-solving* model. To learn the specifics of the *problem-solving* model, the reader is directed to the article written by Deno (2005). Within the application of the *problem-solving* model, the school psychologist integrates and evaluates the impact of culture and language at each stage of the process. During this process, collaboration inhibitors may be uncovered that apply specifically to Latino parents and their ability or inability to participate in the treatment process (e.g., work demands, school policies, interpreter availability, etc.). Addressing these factors may facilitate parental participation. Secondly, *ethnic validity* calls for a determination of *intervention acceptance*. In order to increase *intervention acceptance*, school psychologists can evaluate whether the intervention or collaborative strategy that has been selected agrees with the culture, the values, and the customs of the family (Miranda, 2008). For example, as mentioned previously, when working with Latino families, the cultural value of *familismo* (family-centered) calls to include family members in the collaborative process which can in turn enhance collaboration acceptance. *Familismo* not only involves immediate family members but extended families as well (i.e., cousins, uncles, and *compadres* or "godparents"). Another aspect to consider in this step is the concept of *confianza* (trust). *Confianza* is cultural expression of faith that is developed within a trusting relationship. Stanton-Salazar (2001) conceptualizes this as a complex trusting relationship in which two mutual participants can engage in matter without the feeling being misled or manipulated.

The final step involves *teaming*, or carrying out the intervention within the confines of home-school collaboration. Miranda (2008) includes the following components that *teaming* is comprised of: "Interaction and collaboration, ethnic group representation and participation, and distributed decision making power" (p. 1746).

During interaction and collaboration, the focus should be on creating a positive atmosphere where the family feels valued and "*respeto*" or respect. *Respeto* in the Latino community refers to respecting family members within the family hierarchy (Santiago-Rivera, Arredondo, & Gallardo-Cooper, 2002), such as deferring to family members for intervention selection and acceptance. The second step in this process involves including school-based personnel that are of the same ethnicity and speaks the family's language. This step may pose challenges in schools where there are no members in the school or community that are inclusive of the family's background. All efforts should be made to make this step possible whenever feasible. The final step in home-school collaboration will involve distributed-decision making power. This step is perhaps the most important because it communicates the message to the family that they are equal members of the team. Distributed-decision making power is expressed when educators include parents and listen to their perspectives when developing interventions. If Latino parents feel valued, respected, and included, the likelihood that they will participate and collaborate in the intervention process will increase (Ortiz, Flanagan, & Dynda, 2008).

Strategies for Increasing Latino Home-School Collaboration.To increase home-school collaboration, school-based professionals, and school psychologists in particular, need to define and outline expectations for school home-school collaboration and adapt to their school's culture and milieu. The National Network Partnership of Schools (NNPS) provides a framework to institute, support, and improve home-school collaboration. The NNPS bases its approach on Epstein's et al.'s (2002) framework, which establishes the following six types of collaborative expectations/outcomes which can be adapted to working with Latino parents in the following way:

- *Parenting* - Assist families in creating supportive home environments through workshops/ informational meetings.
- *Communication* - Discussions about school programs and child progress.
- *Volunteering* - Enlisting parents to help at school, home, and other locations.
- *Learning at Home* - Providing the parents with ideas about how to support students in their homework or other activities.
- *Decision-Making* - Soliciting and appointing parents to serve as leaders, decision-makers, and representatives on school committees.
- *Collaborating with the Community* - Locating and using services from the community.

When working with Latino parents, the abovementioned types of parental involvement can serve as a framework for defining and guiding school-based professionals. However, ecological and ethnic validity must be considered in order to enhance participation and intervention/collaboration acceptance. Table 2 provides approaches based on Epstein's et al. (2002) framework for parental involvement and strategies for school-based professionals. Considerations of ethnic validity and ecological variables are discussed.

Table 2: *Involvement Strategies for Latino Parents*

Type of Involvement	Strategies	Ecological Perspective	Ethnic Validity
Parenting:	Parenting strategies (social-emotional); educational, school based orientation, report card information.	CLD parenting strategies; Interpreters; bilingual/bicultural liaisons; flexible meeting times.	Provided in parent's language. Parents have input in selecting material/information (*Respeto*)
Communication:	Phone calls to invite to meetings (i.e., IEP, SST, etc); follow up with written communication; newsletters.	Parent friendly language; liaison to call and invite parents; gather alternative phone numbers.	Communication in native language. Ask parent who should be primary home contact (*Familismo*)
Volunteering:	Class parent, telephone tree, parent room, etc.	Flexible times to volunteer; bilingual school to train and support; incentives for volunteering.	Communication in native language. CLD parents to recruit other CLD parents.
Learning at Home:	Discuss state standards, homework/behavior practices; behavioral/social expectations.	Respect family time; empower families with limited education.	Involve family members (*Familismo*). Appreciate home support in native language.
Decision Making:	Parent leaders, parent empowerment, home-school committees (PTA/advisory, etc.).	Flexible meeting times. Shared decision making. Leadership awareness classes.	Communication in native language. CLD parents to recruit other CLD parents (*Confianza*).
Collaborating with the Community:	Information on community health, counseling, job training, support services, etc.	Low cost resources; evening services.	Native language services. Family-centered (*Familismo*).

When selecting and implementing any strategy, it is important to note that the strategy selection must be inclusive and respectful of the family's origin, culture, religion, and native language. School-based practitioners are encouraged to consult with community-based leaders, religious organizations, and university-based faculty with expertise in the Latino culture before instituting any strategy or intervention (Martines, 2008).

CONCLUSIONS

With the increase of Latino demographics in public schools systems across the United States it is imperative that school psychologists develop skills and strategies to enhance collaborative efforts between the school and home environments. The need for home-school partnerships becomes especially important when mental health issues are of concern and the need to work together becomes foundational to successful outcomes. School psychologists as collaboration and mental health experts can serve as consultants for selecting strategies that demonstrate value and acceptance for Latino families in the school system.

This article discussed the existing literature on Latinos' perspective of their involvement in their children's education as well as educators' expectations of physical involvement in the school setting. There is an obvious discrepancy between the two that lends for misunderstandings. In order to facilitate student success, schools and parents must work together effectively and efficiently. School psychologists are encouraged to identify inhibitors of their Latino parents and what might be contributing to their ability or inability to become physically involved in their children's education. Through this investigation, it is hoped that the gap might decrease between Latino parents' involvement and educators' expectations. School psychologists may also identify inhibitors or barriers that prevent Latino parents from participating physically on the school campus. Additionally, implementing the strategies discussed herein may prove helpful in bridging the gap between schools and Latino families.

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TOC

GENERAL ARTICLES

TOC

Intrinsic Motivation to Learn: The Nexus between Psychological Health and Academic Success

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Intrinsic motivation (IM) to learn, if cultivated, can lead to many academic and social/emotional improvements among K-12 students. This article discusses intrinsic motivation to learn as it relates to Self Determination Theory and the trouble with relying solely on extrinsic motivators. The academic benefits of IM in the specific subject areas of reading and mathematics are reviewed, as well as various psychological benefits (e.g., enhanced persistence, prosocial behavior and happiness). Science-based methods of fostering IM in students are considered, especially enhancing children's environments through elevating teacher and parental autonomy support. Suggestions for integrating intrinsic motivation with behavioral interventions are also provided.

KEYWORDS: Academic engagement; intrinsic motivation; elementary school students; high school students; parenting style; behavior change

Teachers frequently struggle to motivate their students (Brophy, 2008; Froiland, 2010) and most students lose intrinsic motivation to learn each year as they move from first grade to high school (Lepper, Corpus & Iyengar, 2005). Intrinsic motivation to learn entails engaging in learning opportunities because they are seen as enjoyable, interesting, or relevant to meeting one's core psychological needs (Ryan & Deci, 2000). According to self-determination theory, all people seek to satisfy three inherent psychological needs: the need for developing competence, the need for relatedness (creating meaningful connections with others), and the need for autonomy (perceiving that one is able to initiate and regulate one's own actions). Satisfaction of these psychological needs promotes intrinsic motivation (Deci, Vallerand, Pelletier & Ryan, 1991). Motivation can fall anywhere on the continuum from amotivation (lack of the intent to act), to extrinsic motivation (seeking to avoid punishments and gain external rewards), to introjected regulation (studying or behaving well because one feels pressure from within), to identified regulation (recognizing the importance or value in developing a behavior or skill), and finally, to intrinsic motivation (behavior motivated purely by the inherent benefits) (Deci et al., 1991; Ryan & Deci, 2000). Autonomous motivation is a broad term that encompasses both identified regulation and intrinsic motivation, which are the two highest forms of motivation, according to self-determination theory. As an illustration of the motivational continuum, an amotivated student would be uninterested in completing homework, so implementing a contingent reward system could help the student move from amotivation to extrinsic regulation, such that the student would likely study just hard enough to gain the rewards or avoid negative consequences. A student whose behavior is regulated through introjection would turn in his/her homework on time to avoid feeling like a terrible student or to avoid guilt, while a student whose behavior is regulated through identification would voluntarily study more because he/she realizes the importance of doing well in school. Intrinsically motivated students seek to learn more about a subject of interest both in school and outside of the regular school day because they find enjoyment and deep purpose in learning; their behavior is fully regulated from within. Identification and intrinsic motivation (the autonomous forms of motivation) are the most enduring forms of motivation and are robustly related to academic success and psychological well-being (Deci et al., 1991; Froiland, 2011a).

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THE IMPORTANCE OF UNDERSTANDING INTRINSIC MOTIVATION IN SCHOOLS

Intrinsic motivation is associated with high levels of effort and task performance as well as preference for challenge (Patall, Cooper, & Robinson, 2008), which are desirable attributes to cultivate among students who will eventually be competing in the most educated work force in history. Children who have well developed intrinsic motivation are more likely than others to demonstrate strong conceptual learning, improved memory, and high overall achievement in school (Gottfried, 1990). Students with high levels of intrinsic motivation are more likely to experience flow, a state of deep task immersion and peak performance which is accompanied by the sense that time is flying by (Shernoff & Csikszentmihalyi, 2009). The benefits of intrinsic motivation to learn also include broader measures of school success like improved psychological well-being (Deci & Ryan, 2008), positive affect while doing homework (Froiland, 2011a), and less drug abuse (Battistich, Schaps, Watson, Solomon & Lewis, 2000). Studies have also shown that students with higher intrinsic motivation at the outset of the semester displayed more persistence and were less likely to drop out of school (Vallerand & Bissonnette, 1992; Hardre & Reeve, 2003). Intrinsic motivation is also a strong factor in performance, persistence and productivity for adults in the working world (Grant, 2008) and is a pathway to happiness for adults and children (e.g., Froiland, Smith, & Peterson, 2012), which makes it vital for children's success and life satisfaction after school. The aforementioned reasons alone are enough for school psychologists to shift their focus toward increasing intrinsic motivation to learn in their students.

Furthermore, school psychologists report that motivational issues account for 25% of student referrals, which indicates that motivation should be considered regularly during assessments and preventive work (Cleary, 2009). This percentage may be an underestimate because parents and teachers may believe that introjected children are intrinsically motivated because they do not require external prompts and salient rewards; when in fact such children lack intrinsic motivation and often experience significant academic anxiety (Ryan & Connell, 1989; Ryan & Deci, 2000). Although school psychologists have much more expertise in motivation than parents or teachers have, they also often fail to accurately assess children's motivation because many focus solely on whether children are extrinsically motivated, and neglect to assess the child for other types of motivation. As a prime example, consider the can't do/won't do assessment that is considered a best practice for use by school psychologists within an RtI framework (VanDerHeyden & Witt, 2007). This entails first measuring a student's performance on an academic task using normal procedures. If a child is found to be at risk for failure at Tier 1 of RtI, then the can't do/won't do assessment can be done at Tier 2 to help determine interventions to strengthen either her motivation or skills (VanDerHeyden & Witt, 2007). For instance, a reading fluency probe can be administered. Then, the student is told that if she increases the amount of words read aloud per minute significantly, she will receive a tangible prize. If she improves her fluency significantly on the second trial, it is assumed that her deficit is in motivation rather than in skill. In one study over 25% of students fell into the motivational deficit category (VanDerHeyden & Witt, 2007). While the can't do/won't do assessment elicits a greater awareness of motivational vs. skill needs among students, the focus is solely on extrinsic regulation and neglects intrinsic motivation or anything in between (e.g., identified and introjected regulation). Thus, the related motivational interventions are focused on the extrinsic regulation of behaviors (through reward systems similar to the one used during the assessment). This is problematic because studies have shown that students who are excessively extrinsically regulated lose initiative and do not learn as well, particularly when learning is intricate or requires conceptual understanding and creative processing (Benware & Deci, 1984; Grolnick & Ryan, 1987).

Moreover, despite the fact that a contingent behavioral reward system often results in positive behavior change, these changes are often not enduring (due to extinction once the reward system is removed; Hardman, Horne & Lowe, 2011) and are not nearly as healthy, due to the generally negative association between extrinsic rewards and intrinsic motivation (Deci, Koestner, & Ryan, 1999). Deci et al. (1999) conducted a meta-analysis of the effects of extrinsic motivators (e.g., tangible rewards, praise) on the intrinsic motivation levels of subjects from pre-school to college age. The results showed that

there is a significant negative correlation between intrinsic motivation and tangible rewards, whereas praise did not negatively affect intrinsic motivation and sometimes enhanced it (Deci et al., 1999). In light of this finding, it is important that school psychologists teach educators how to focus on cultivating and maintaining intrinsic motivation to learn, and are careful not to rely heavily on tangible rewards as a means of ameliorating students' academic effort. If behavioral techniques are used, then authentic and enthusiastic praise should be the primary motivator.

Importance of Promoting Intrinsic Motivation in Literacy

The statistics on reading motivation are especially alarming. According to the National Assessment of Educational Progress, 73% of children do not read frequently for enjoyment (Perie, Grigg & Donahue, 2005). The general lack of intrinsic motivation to read is in accordance with the finding that U.S. is ranked number 33 out of 35 countries as a nation, on a survey of reading motivation (Mullis, Martin, Gonzalez & Kennedy, 2003). Therefore, American educators need to start placing more importance on fostering intrinsic motivation to read, and school psychologists can be the catalysts of this change.

Children who understand the benefits of reading perform better and enjoy many aspects of literacy (Csikszentmihalymi, 1990). Normative reading achievement increases more for those who are intrinsically motivated to read (Unrau & Schlackman, 2006) and intrinsic motivation is positively associated with reading more frequently, fluently, and with greater comprehension (Guthrie,Wigfield, Metsala & Cox , 1999; Law, 2009; Becker, McElvany, & Kortenbruck, 2010). None of this is surprising because intrinsically motivated readers use more reading strategies than their peers, such as the following: rereading difficult passages; having a purpose in mind before picking up the text, taking notes while reading as well as questioning and making inferences about what they have read (Mokhtari & Reichard, 2002).

The frequency with which children read is an important factor that is directly tied with intrinsic motivation. In a longitudinal study, Becker et al. (2010) showed that the children who see reading as a desirable activity read more frequently and thus develop better reading skills. Intrinsically motivated readers are inclined to read more often than non-intrinsically motivated readers because they discover the inherent enjoyment in the activity (versus reading only when some contingent reward system is in place or when they feel under pressure to read). Ultimately, intrinsic motivation leads to greater reading skills due to richer and more frequent engagement with printed material (Becker et al., 2010).

One well-researched intervention that targets intrinsic motivation to read is the Concept-Oriented Reading Instruction (CORI) program. The CORI program targets the improvement of reading engagement in students in the 4th and 5th grades. They define reading engagement as the simultaneous use of motivational processes and cognitive strategies while reading. CORI focuses on promoting the following five motivational processes that are pivotal to reading engagement: intrinsic motivation, perceived autonomy, self-efficacy, collaboration and mastery goals. The program works by showing teachers how to incorporate five instructional practices into their classroom that are directly related to the five motivational processes. These processes include autonomy supportive teaching and intrinsic goal setting. A meta-analysis of 11 different implementations of the CORI program in different schools showed that the students in the CORI group compared to the control group had higher intrinsic motivation to read, higher teacher ratings on reading engagement and read significantly more for enjoyment and outside of the classroom (Guthrie, McRae & Lutz Klaudia, 2007). School psychologists could teach the five instructional practices of the CORI program to teachers in their schools, thereby promoting intrinsic motivation to read in their students.

Benefits of Fostering Intrinsic Motivation in Math

Academic intrinsic motivation significantly declines over the average students' K-12 school career, but the greatest decline is in intrinsic motivation toward mathematics (Gottfried, Fleming, & Gottfried, 2001). In a recent study, the United States scored significantly lower than 17 of 33 other member countries

of the Organization for Economic Cooperation and Development (OECD) on a measure of motivation for mathematics (Fleischman Hopstock, Pelczar, & Shelley, 2010). Because cutting edge economies will increasingly be based on science, technology, engineering and applied mathematics skills, improving mathematics achievement is essential if we want to prepare students who can compete globally and solve the complex problems of the future (Lee, 2011). Therefore, educators need to emphasize intrinsic reasons for learning math.

Like reading, math requires strategies and persistence to become successful. Intrinsically motivated students are more likely than their peers to use effective math strategies such as estimating, visualizing, and checking (Montague, 1992). They are also more prone to select deeper performance and learning strategies. For instance, if given a choice between a simpler or a more complex math problem, the intrinsically motivated child would choose the more complex problem because he/she prefers a challenge and wants to test his/her understanding of the material. Then, if the method for solving this problem is not immediately apparent the child may use his/her creativity to solve the problem in an unorthodox way, and persist through the problem, expecting eventual success (Middleton & Spanias, 1999). Mathematics courses can be arduous and intrinsic motivation can energize children to invest the effort and utilize the strategies necessary to be successful.

Additionally, Stipek, Salmon, Givvin, Kazemi, Saxe and MacGyvers (1998) found that students who had teachers that emphasized learning mathematics rather than just getting the answers right perceived themselves as being more competent in mathematics and experienced more positive emotions toward the subject. These same students also made greater gains on a fraction assessment that was given to them after a lesson on fractions (Stipek et al., 1998). Stipek et al. (1998) pointed out that math reform leaders were calling for the same types of changes that motivation experts are calling for, such as more positive verbal feedback, emphasis on deep understanding rather than performance goals, multiple ways of finding solutions and support of risk-taking when problem-solving rather than chastising children for getting the problem wrong. In other words, both math reform experts and motivational experts are calling for teachers to use an autonomy supportive style of instruction. In accordance, school psychologists can consult with teachers to show them how to adopt an autonomy supportive teaching style in the mathematics classroom (see the "Ways of Promoting Intrinsic Motivation in Students" section).

The Importance of Intrinsic Motivation to Learn and Special Education

Fostering intrinsic motivation to learn is especially important with students in the special education population. According to a study conducted by Grolnick and Ryan (1990), children labeled with a learning disability have lower perceived competence than a matched-IQ control group. As mentioned in the introduction, competence is a core psychological need within self-determination theory. In the same study, teachers rated learning disabled students as lower in motivation, competence, and self-esteem. School psychologists could help special education students elevate their perceived competence and autonomous motivation by teaching them to generate their own goals for academic progress, showing them graphs of their progress over time, and reminding them of intrinsic reasons for learning the material (e.g., "You'll be able to use these writing skills to share your witty jokes with more people"). In another study, Deci, Hodges, Pierson and Tomassone (1992) found that autonomous forms of motivation (i.e., identified regulation and intrinsic motivation) in students with an emotional disturbance and or a learning disability (at both the elementary and high school levels) positively predicted math and reading achievement. Because children in special education are at a higher risk of dropping out of school than other children and intrinsic motivation predicts more persistence and lower high school dropout rates (Hardre & Reeve, 2003), intrinsic motivation to learn could help special education students enhance both their high school completion rates and achievement.

Benefits of Facilitating Intrinsic Motivation for Emotional Health and Behavior

Besides the home, school is one of the primary places to cultivate happiness in children and intrinsic motivation is a key ingredient for developing happiness (Froiland et al., 2012). Intrinsically motivated

children are highly engaged in their learning and have a proclivity to experience a state of flow (Shernoff et al., 2003) and school days seem to go by relatively quickly because the students are enjoying themselves (Conti, 2001). Conversely, the school day often seems cumbersome and miserable to amotivated or extrinsically regulated students who feel they are forced to be there with no deep sense of purpose.

Besides being important for psychological well-being, happy children in schools can contribute to a more positive school environment, making the school a better place for not only the students but also the faculty and staff (Chafouleas & Bray, 2004). Intrinsic motivation is linked to prosocial behavior, which involves being agreeable, helpful and caring about the welfare of others (Grant, 2008). Intrinsic motivation is crucial to helping children become prosocial and altruistic citizens. School-wide interventions that elevate intrinsic motivation to learn and prosocial intrinsic motivation, also lead to reductions in drug use, violence, and vandalism (Battistich et al., 2000), as well as foster a sense of school community where students care, respect, and feel a commitment to one another (Battistich, Solomon, Kim, Watson & Schaps, 1995). Therefore, elevating intrinsic motivation is an attractive goal for school psychologists because it is strongly related to multiple facets of academic success and psychological well-being.

WAYS OF PROMOTING INSTRINSIC MOTIVATION IN STUDENTS

Autonomy Support in the Schools

Autonomy supportive schools, classrooms, and home environments promote intrinsic motivation for students (Froiland, 2011a; Froiland et al., 2012). School psychologists can teach parents and teachers to promote autonomous motivation through the following components of autonomy supportive communication: empathic statements; allowing students to make their own choices when appropriate; letting students know that they value creative self-expression; giving students time to solve problems on their own and providing suggestions or hints only when needed; highlighting the interesting or meaningful features of a task or assignment; asking children what they learned after they receive a good grade, rather than solely celebrating the grade; and using motivational analogies, such as "Spending time on homework is like sowing seeds, eventually you will reap a big harvest of precious knowledge and skills" (Froiland, 2011a; Reeve, & Jang, 2006).

An autonomy supportive teaching style can initiate cascading effects that enhance the classroom and school atmosphere. When teachers become more autonomy supportive and share their own passion for subject matter, they will not only enhance the intrinsic motivation of their students, but those inspired students will also spread their motivation to their peers in other classes (Froiland et al., 2012; Radel, Sarrazin, Legrain, & Wild, 2010). Furthermore, students who are intrinsically motivated elicit increased autonomy support from their teachers over the course of the school year, which leads to further increases in student intrinsic motivation (Skinner & Belmont, 1993). Radel et al. (2010) examined whether motivation can be spread from teachers to students, and, subsequently, from students to their peers. This was studied through exposing high school students to one of two guest physical education teachers; the students were told that either their teacher was a highly motivated volunteer, or that their guest teacher did not want to participate and even requested a large sum of money to come (Radel et al., 2010). The motivated volunteer teacher encouraged intrinsic motivation in the students while the reluctant teacher fostered extrinsic motivation in the students (Radel et al., 2010). Additionally, when the students of the motivated volunteer were instructed to teach this same lesson to their peers, they encouraged intrinsic motivation and fuller participation among peers, whereas the students of the reluctant teacher promoted extrinsic motivation (Radel et al., 2010). Thus, teachers can influence their students' motivation by revealing the quality of their own motivation toward the learning activity.

Another beneficial quality of autonomy supportive communication is that it can be paired with praise to enhance intrinsic motivation, rather than diminish it, like other forms of behavioral rewards (Deci & Ryan, 2008). Praise is most effective when delivered immediately after the behavior, frequently, enthusiastically, with eye contact, while describing the positive behavior to the student, and with

varied words (Rhode, Jenson & Reavis, 1992). The key components that differentiate praise as a normal behavioral reinforcer (that promotes extrinsic motivation), and praise delivered in an autonomy supportive way (that may promote intrinsic motivation and extrinsic motivation), are the descriptive and relationship-focused aspects (eye contact and enthusiasm). It is important that, while delivering the praise, the teacher explains to students that they are being praised for their mastery of the material, progress, use of creativity to solve a problem, or their willingness to take a risk (all autonomous qualities) and not their just their compliance, completion of work, or achievement of a good grade. In this way, the praise conveys information to the student about their level of competence, which satisfies their psychological need for competency (Deci & Ryan, 2008). Furthermore, enthusiastic praise coupled with eye contact, as opposed to praise that is delivered with a monotone voice and without eye contact, may help meet students' need for relatedness. Importantly, implementing autonomy supportive communication in the classroom doesn't require a complete overhaul of what the teacher has been doing previously (e.g., behavioral classroom management techniques). Rather, a strategic adjustment in the way teachers deliver praise can help students transform from feeling controlled, to being given positive, useful information which satisfies their psychological needs (Deci & Ryan, 2008). This is important because there is the potential for a motivational synergy, in which both intrinsic and extrinsic motivation levels are high (Hayenga & Corpus, 2010) via effectively delivered praise.

One large-scale intervention that emphasizes autonomy supportive communication is the Child Development Project now called the Caring School Community (CSC). The CSC is a prevention program that has been implemented in 321 schools across America and has followed the participating students for 7 years. The program was developed based on the self-determination theory position that students learn best when their three basic needs of competency, relatedness and autonomy are met, and training is provided to show teachers how to create a school environment which fosters these needs. For example, teachers were taught how to hold class meeting lessons, where students are given the chance to voice their opinion and work together as a team to come up with a solution for a problem affecting everyone (i.e., lack of focus during lessons). This activity clearly fosters autonomy because the teacher is allowing the students to contribute to the discussion in a creative way as well as empowering students to help solve their own classroom issues. After implementing classroom meeting lessons and other components of the program (e.g., reading books that promote altruism and discussing readings at home with parents, thereby meeting the need for relatedness) for a couple of years, the research team evaluated several measures of student well-being in both the experimental and control groups. The experimental group showed significantly more improvement in intrinsic motivation to learn, prosocial intrinsic motivation, peer relationships, and perception that they are part of a school community. Furthermore, students that received the program also exhibited less drug abuse and aggressive behavior than peers in the comparison group (Battistich, 2003). The U.S. Department of Education's (USDE) Institute of Education Sciences (IES) lists the CSC as a research-based prevention program within the What Works Clearinghouse (USDE, IES, 2007); and the tools and training used in the CSC could be readily implemented by school psychologists.

School psychologists can also train parents to be autonomy supportive in the home. In a seven-week study, parents met with a school psychologist for 30 minutes a week and were taught how to be autonomy supportive (Froiland, 2011a). The school psychologist used social-cognitive techniques such as persuasion, modeling, role-play, practice and feedback to illustrate autonomy supportive techniques to the parents. These included, but were not limited to: explaining to the children why learning the material is important and suggesting how their homework is preparation for making the world a better place; helping the parents to be considerate of the child's struggles with homework and to make suggestions like a consultant, without doing the work for them or losing patience with them; highlighting the interesting aspects of homework topics; emphasizing that the process of studying enhances one's cognitive development, much like physical exercise promotes physical fitness; acknowledging students feelings; practicing the art of warmly listening to their children talk about what they learned at school; emphasizing what students learned over the grade they received on a test. After seven weeks, parents in

the treatment group reported that their children were more intrinsically motivated to do their schoolwork, and children reported feeling more positive emotions about doing homework (Froiland, 2011a). It is possible for school psychologists, with relatively little time and resources, to promote positive change in the home learning environment through autonomy supportive communication.

Intrinsic Goal Setting

In addition to consulting with parents and teachers, school psychologists can also foster intrinsic motivation in students by counseling them to set intrinsic goals. Husman and Lens (1999) proposed that student motivation is in part determined by how the student integrates the future into the present through motivational goal setting. This is also known as a future time perspective (FTP). Students with a long FTP (they can set goals far into the future) are more persistent in working toward a goal and find more satisfaction in their goal-oriented behaviors than students with a short FTP and future goals are negatively affected by extrinsic rewards and regulation (Husman & Lens, 1999). To encourage intrinsically motivated behaviors, students need to understand how their present academic goals will relate to their future life goals (Husman & Lens, 1999); for instance, a school psychologist helped a high school student see that learning everything she could in her science class would prepare her to help more people as a physical therapist. This motivational epiphany about how her science class was connected to her long term aspirations led to drastic improvements in her intrinsic motivation, quality of studying and grades (Reiss, 2011).

Extrinsic goals are contingent on some type of reward or praise from others (e.g. wealth, grades, looking good) while intrinsic goals promote self-actualization (e.g., personal growth, becoming healthier or helping others; Kasser & Ryan, 1996; Vansteenkiste, Soenes, Verstuf & Lens, 2009). Intrinsic goals are positively related to well-being and are negatively related to distress, whereas extrinsic goals have the opposite effect (Kasser & Ryan, 1996). Extrinsic goal framing distracts a student from specific academic tasks while intrinsic goal framing causes the student to focus on the task at hand (Vansteenkiste et al., 2009). A study done by Vansteenkiste, Simmons, Lens, Sheldon and Deci (2004) illustrated that children are more likely to master the material if they set an intrinsically based goal for leaning such as, "Learning this will increase my personal growth," vs. an extrinsically based one like "If I learn this I will earn money." Additionally extrinsic goals direct students to focus on their performance in comparison to their peers rather than learning for the sake of learning (Vansteenkiste et al., 2009) and children who learn to set intrinsic goals for homework are more likely to develop positive emotions toward homework (Froiland, 2011a). School psychologists could teach students how to set intrinsic goals during counseling sessions and thereby empower students to mobilize their own intrinsic motivation.

CONCLUSIONS

Maintaining and enhancing intrinsic motivation among students requires autonomy supportive home and school environments (Froiland, 2011a; Froiland, 2010; Froiland et al., 2012; Ryan & Deci, 2000). When students are intrinsically motivated to learn they learn more, exhibit better behavior, are happier and aspire to contribute to the betterment of society. Intrinsically motivated learners have a greater sense of well-being and are more engaged in the classroom because they understand the inherent benefit of education (Ryan & Deci, 2000). When children are intrinsically motivated to make the most of their learning opportunities and treat others well, they are truly preparing to contribute to the betterment of society.

In order to promote intrinsic motivation to learn among students, school psychologists could consider the Caring School Community as a potential prevention program for their districts (see USDE, IES, 2007). Furthermore, for reading in particular the CORI program is worthy of considering (Swan, 2003). School psychologists could also become familiar with the facets of teacher autonomy support so that they can recommend specific teacher autonomy supportive techniques during either behavioral or instructional consultation (e.g., Reeve & Jang, 2006). School psychology trainers could also further

research parental autonomy support interventions (e.g., Froiland, 2011a) because there is the potential to synergistically promote intrinsic motivation to learn at both home and school (Froiland et al., 2012). School psychologists who consult with parents can look for opportunities to ameliorate controlling parental practices because they are associated with lower intrinsic motivation (Froiland, 2011a), perfectionism and depression among children (Kenny-Benson & Pomerantz, 2005).

Praise is the positive reinforcer that has the potential to elevate both intrinsic motivation and extrinsic motivation. Thus, we encourage school psychologists to emphasize autonomy supportive praise which includes enthusiastically describing how the student is progressing toward academic or interpersonal mastery, showing pizzazz, diligence, using good strategies or exhibiting personal expressiveness. Although tangible rewards may be necessary to help some amotivated students develop extrinsic regulation of positive activities, warm and descriptive praise is a more viable positive reinforcement than tangible rewards because of the potential synergy with intrinsic motivation.

Due to the long-term benefits associated with fostering intrinsic motivation, school psychologists would be wise to utilize interventions that develop intrinsic motivation. Motivation problems are among the most frequent reasons for referrals (Cleary, 2009), and it behooves us as psychologists to add insight from intrinsic motivational theories and research to our arsenal of motivational understanding and interventions. Because psychologists in the schools are trained to promote mental health and academic success (e.g., Froiland, 2011b; Froiland & Smith, 2012), it is time for us to diligently promote intrinsic motivation to learn in the schools, for it is the nexus between psychological well-being and academic success.

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Creating Readiness for Response to Intervention: An Evaluation of Readiness Assessment Tools

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Response to Intervention (RtI) is a promising approach for meeting the needs of all students in our nation's schools. However, attempts to shift to an RtI model are likely to be ineffective if the unique features of a school as a system are not considered prior to implementation. Therefore, it is important that school teams assess readiness for initial implementation in order to foster a school climate receptive to change. In light of this need, the primary goals of the present study were to describe the components of readiness for implementation of RtI and to evaluate the alignment of commonly used RtI readiness assessment tools to these components. From a comprehensive literature review, the authors identify six interrelated components of RtI readiness: stakeholder readiness, resource readiness, systems readiness, data readiness, evaluation readiness, and student supports readiness. From content analyses of 21 RtI readiness assessment tools, the authors identify five tools that most effectively assess readiness across these six domains. Initial recommendations for school professionals on the selection and use of readiness tools and a call for development of research-validated practices in RtI readiness assessment are also presented.

KEYWORDS: Response to Intervention, readiness assessment, systems change

Response to Intervention (RtI) is a model of assessment and intervention that incorporates evidence-based practices schoolwide, supplemental group-based supports, and intensive individualized interventions that hold promise for improving the educational outcomes of all students (Fuchs & Fuchs, 2006; Fuchs, Mock, Morgan, & Young, 2003). The systemic shift to an RtI model requires substantial change in the way that schools operate (Hollenbeck, 2007). Therefore, regardless of the potential for RtI to meet the needs of all students, attempts to shift to an RtI model may well be ineffective if the systemic features of the school are not considered.

According to Adelman and Taylor (1997), the successful implementation of systems-level educational innovations, such as RtI, occurs in four overlapping, nonlinear phases: (a) *creating readiness* fosters a school climate receptive to schoolwide change, (b) *initial implementation* begins with a carefully planned, phased process of implementation, (c) *institutionalization* follows from full implementation and sustainability and (d) *ongoing evolution* occurs as the system incorporates new knowledge and practices through a continuous improvement process. This systemic-change model has been applied to the implementation of RtI (see Ervin, Schaughency, Goodman, McGlinchey, & Mathews, 2006; Grimes, Kurns, & Tilly, 2006). It is the creating readiness process that is the focus of the present investigation.

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Creating readiness is the phase in which we establish a foundation to begin implementation of an educational innovation such as RtI. Yet, it is the creating readiness phase that is likely to be bypassed in anticipation of initial implementation of RtI. To create readiness for change, it is important to gain an in-depth understanding of the school as a system and its stakeholders. Assessment tools may be helpful in developing this deep understanding (Curtis & Stollar, 2002; Ervin & Schaughency, 2008; Smith & Freeman, 2002).

Numerous readiness self-assessment tools specific to RtI have been developed for schools by state departments of education and other organizations promoting scale-up to widespread RtI implementation; however, these tools are not represented in the literature and the extent of their alignment with the literature is unknown. Consequently, the value of these measures for supporting successful implementation is unknown. Therefore, the goals of the present study were to: (a) describe the components of readiness for initial implementation of RtI, (b) evaluate the alignment of commonly used RtI readiness assessment tools to these readiness components, and (c) to provide recommendations for school professionals on the selection and use of readiness tools to formulate action plans for implementation of RtI. A comprehensive literature review was conducted to identify the components of readiness as drawn from the literature on RtI implementation and organizational systems change. Based on the literature review, the authors identified six interrelated and interconnected components of RtI readiness described in the following section.

STAKEHOLDER READINESS

Creating readiness for RtI begins with those who hold a stake in the outcomes of the school. Therefore, those involved in readiness creation must consider the roles and responsibilities of school stakeholders, including the administration, core planning team, school staff, and community.

Administrative support and involvement. Any schoolwide initiative must be sanctioned by those who hold the decision making power and allocation of resources within the system (Ervin & Schaughency, 2008; Fuchs & Deshler, 2007; Hall & Hord, 2006; Stollar Poth, Curtis, & Cohen, 2006). Therefore, administrative support for RtI must occur as an initial step (Curtis, Castillo, & Cohen, 2008; Fuchs & Deshler, 2007). However, administrative sanction alone is insufficient. Active involvement and leadership from the building-level administrator during the creating readiness phase is essential (Adelman & Taylor, 1997; McGlinchey & Goodman, 2008; Stollar et al., 2006). As such, the building-level administrator should be involved by participating as an active member of the core planning team (Fuchs & Deshler, 2007).

Team roles and responsibilities. Successful systemic change is guided by a representative team of stakeholders (Ervin & Schaughency, 2008; Stollar et al., 2006). Therefore, creating readiness requires the formation of a core planning team at the building level. To ensure the team acts on behalf of stakeholders, team membership should include an administrator, teachers in various roles, related school professionals, and community members (Batsche et al., 2006; McGlinchey & Goodman, 2008). Throughout the change process, the team will fulfill a variety of functions; however, the primary role of the team is to collaborate in data-based problem solving (Curtis et al., 2008). During the readiness phase, teams begin by assessing the needs of the school, the perspectives of stakeholders, and the adequacy of existing systems. RtI readiness assessment tools are designed to guide such planning processes (Ervin & Schaughency, 2008; VanDerHeyden, Witt, & Gilbertson, 2007).

Staff support. Buy-in and support from school staff is necessary for successful implementation of schoolwide initiatives (Denton, Vaughn, & Fletcher, 2003; Lau et al., 2006; McGlinchey & Goodman, 2008). A benchmark of 80% staff buy-in is commonly recommended in the literature; however, evidence in support of a specific benchmark for staff support is lacking. Staff members vary in their willingness and ability to adapt to new approaches. Resistance is a natural part of the systemic change process (Adelman & Taylor, 1997; Curtis et al., 2008; Ervin & Schaughency, 2008). As such, creating readiness for staff buy-in and support requires building staff awareness, interest, and knowledge of RTI (Elliott & Morrison, 2008; Rogers, 2003).

Family involvement. Families are an important stakeholder group affected by systems change (Ervin & Schaughency, 2008). To creating readiness, efforts must be made to involve families. Consideration must be given to how parents will be involved in their child's education at all systems levels.

RESOURCE READINESS

The implementation of the RtI model requires a shift in the professional roles and responsibilities of school staff. Establishing readiness for RtI requires the allocation of resources and professional development to support these shifting roles and responsibilities.

Resources. During the readiness phase, resources must be allocated to support initial implementation. Sufficient time must be allocated for the core team to assess school needs and plan for initial implementation. Funding is necessary to support initial implementation, including funding for instructional and assessment materials, technology and support, professional development, and additional staff as needed (Ervin & Schaughency, 2008; Fuchs & Deschler, 2007; Rogers, 2003; Taylor et al., 1999).

Professional development. Professional development is critical in establishing readiness for systemic change (Ervin & Schaughency, 2008; Fuchs & Deshler, 2007; Hollenbeck, 2007; Kratochwill, Volpiansky, Clements, & Ball, 2007). Many school professionals lack pre-service preparation in RtI (Denton et al., 2003); and they will experience significant changes in their professional roles following the implementation of RtI. As uncertainty and lack of information are often barriers to readiness (Rogers, 2003), leaders should plan for professional development that systematically builds the knowledge and skills needed to implement RtI (Danielson, Dolittle, & Bradley, 2007; Denton et al., 2003; Kratochwill et al., 2007).

SYSTEMS READINESS

Readiness for systemic change requires consideration of the school as a system. Planning teams should consider the impact of changes in policies, priorities, and climate on the system.

Policy. During the creating readiness process, existing policies should be revised and shared with stakeholders. Printed policies are not only useful for documenting procedures and ensuring consistent implementation, but are essential for ensuring the sustainability of procedures. Policy statements should summarize the rationale for RtI, the procedures for RtI implementation, and procedures for special education eligibility (Batsche et al., 2006; Elliott & Morrison, 2008).

Priority. Meaningful systems change requires a high level of shared commitment over time. As such, administrators should identify RtI as one of the top priorities for school improvement (Ervin & Schaughency, 2008), and must establish implementation of RtI as a long-term administrative priority (e.g. 3 to 5 years).

Climate. The climate of the system directly impacts a school's readiness to implement RtI. For example, when high levels of cohesion among school staff are balanced with individual autonomy in performing one's designated responsibilities, stakeholders are more open to innovation. However, when staff experience high levels of strain, stress, and overload, they are less open to new initiatives that impact their role within the system (Simpson & Flynn, 2007).

DATA READINESS

In that RtI requires using data to make decisions in a continuous improvement process, establishing systems for gathering, analyzing, and disseminating data is a critical readiness step.

Needs assessment. Successful implementation follows from in-depth assessment of the current status and needs of the system (Curtis et al., 2008; Rogers, 2003). Teams that invest time upfront assessing school needs are more likely to be successful in establishing meaningful and lasting change as compared to teams that spend little time assessing needs prior to implementation (Stollar et al., 2006). Therefore, a major activity of the creating readiness phase is the assessment of school needs through an audit of current systems, structures, and staff supports (Curtis et al., 2008; Ervin & Schaughency, 2008).

Data system. In that data-based decision making is an essential component of the RtI approach, creating readiness for RtI implementation includes a review of existing data systems. To facilitate data-based decision making, there must be an efficient and user friendly system for gathering and compiling academic and behavioral data for all students (Ervin & Schaughency, 2008; Rogers, 2003).

Data analysis. Whereas an efficient data system is a necessary prerequisite to data-based decision making, it is also necessary that data are regularly analyzed to identify curricular, instructional, and systems-level needs (McGlinchey & Goodman, 2008). The core planning team must establish a regular schedule (e.g. monthly) for reviewing of student data to determine needs and progress (McGlinchey & Goodman, 2008).

Data sharing. It is imperative that data are not only collected, analyzed, and used to guide change efforts, but also disseminated to stakeholders. The core planning team should establish a regular schedule for sharing data (e.g. quarterly) with staff. When data are shared with staff at regular staff meetings, buy-in to the systemic change process is enhanced. Additionally, regular data sharing with parents is likely to foster family engagement in their child's education (Batsche et al., 2006; Elliott & Morrison, 2008).

EVALUATION READINESS

During the creating readiness phase, a major activity of the core planning team is the development of an implementation and evaluation plan.

Implementation plan. During the creating readiness phase, the core planning team develops a multi-year action plan that outlines steps for implementation. It is at this point that the process moves from readiness creation to initial implementation wherein aspirations for systems change are translated into action (Rogers, 2003). The action plan should include measureable goals, timelines, and persons responsible for implementation and oversight of the implementation steps (Batsche et al., 2006; Curtis et al., 2002; Ervin & Schaughency, 2008; Rogers, 2003; Taylor et al., 1999).

Evaluation plan. Beginning in the readiness phase, the team develops a plan for evaluating the outcomes of RtI and the fidelity of implementation. A useful evaluation plan incorporates formative evaluation, or the use of data to identify adjustments during initial implementation, and summative evaluation, or the use of data to determine if the change effort was successful (Curtis et al., 2008; Ervin & Schaughency, 2008; Rogers, 2003). Additionally, the evaluation plan should assess implementation fidelity, or assessment of how well the RtI plan was implemented.

STUDENT SUPPORTS READINESS

At the core of the RtI approach is a tiered system of evidence-based intervention delivered to all students based on their level of need (Hollenbeck, 2007). An effective RtI infrastructure includes multiple levels of increasingly intensive, evidence-based supports (Denton et al., 2003). At the universal level, Fuchs and Fuchs (2006) recommend that an evidence-based core curriculum be effective for at least 80% of students. Targeted supports are provided for those students not responding adequately to universal instruction. For example, targeted supports in reading may be implemented in small groups for eight weeks at a minimum of three days a week for 30 minutes (Fuchs & Fuchs, 2006). Students failing to respond to universal and targeted supports may require intensive instruction, and may be considered for special education eligibility (Kavale & Spalding, 2008).

METHOD

Readiness assessment tools were located by searching the Internet and the following research databases: Academic Search Complete, Education Abstracts, and ERIC. Combinations of the following keywords were used in the search: response to intervention, RtI, readiness assessment, implementation, and checklist. No tools were located in the literature; however, 21 RtI readiness assessment tools were identified via the Internet (see Table 1).

Table 1: *RtI readiness assessment tools and Internet links*

Recommended Tools	
Illinois RtI: District Self-Assessment; Illinois State Board of Education	http://www.isbe.state.il.us/RtI_plan/default.htm
RtI Readiness and Implementation: Self Assessment Tool; Pennsylvania Department of Education	http://www.pde.state.pa.us/special_edu/lib/special_edu/SLDGuidelines8_05_08Final.pdf
Responsiveness to Instruction: A Self-Assessment Tool; Vermont Department of Education	http://Educ..vermont.gov/new/pdfdoc/pgm_sped/forms/rti/rti_tool_1007.pdf
School Readiness for RTI Implementation; Minnesota RtI Center	http://www.scred.k12.mn.us/School/Index.cfm/go:site.Page/Page:3/Area:4/index.html
Self Assessment of Problem Solving Implementation; Florida Problem Solving/ RtI Project	http://www.rtinetwork.org/images/stories/Downloads/sapsi.pdf
Additional Tools	
District and School Readiness Checklist Washington and Maine Dept. of Educ.	www.k12.wa.us/specialEd/pubdocs/RTI/RTI_Appendix_I.doc
District RTI Planning Guide Delaware Dept. of Educ.	http://www.doe.k12.de.us/infosuites/staff/profdev/rti_files/District%20RTI%20Planning%20Guide.pdf
Evaluation of Organizational Readiness for RtI Nebraska Dept. of Educ.	http://rtinebraska.unl.edu/documents/pdf/rti_tech_appendix.pdf
Indicators of School Readiness for RtI Maine Dept. of Educ.	http://www.state.me.us/Educ./rti/indicators_readiness_tool.pdf
Problem Solving Model for Self Study Colorado Dept. of Educ.	http://www.cde.state.co.us/cdesped/RTI.asp
RtI Checklist: Are We Ready? North Dakota Dept. of Public Instruction	http://www.dpi.state.nd.us/title1/cklist.pdf
RtI Planning Checklist; Tennessee Dept. of Educ.	http://www.state.tn.us/Educ./speced/doc/101308RTIchecklist.pdf
RtI Planning Tool; IDEAL Consulting Services, Inc, Westport, MA.	http://www.scituate.k12.ma.us/curriculum/Response_to_Intervention_Planning _Tool_2008.pdf
RtI Readiness Checklist; Oregon Dept. of Educ.	http://www.ode.state.or.us/initiatives/idea/rti.aspx
RTI Readiness Survey ; Nebraska ESD #1	http://www.esu1.org/dept/sped/RTI/Documents/RTIReadinessSurvey.pdf
RTI School Readiness Survey *Intervention Central*	http://www.jimwrightonline.com/pdfdocs/survey_rti_wright.pdf
School Leadership Planning Guide for RTI Delaware Dept. of Educ.	http://www.doe.state.de.us/infosuites/staff/profdev/rti_new.shtml
School Readiness for RtI: A Self-Assessment West Virginia RtI Project	http://wvde.state.wv.us/ose/RtI.html
School Readiness for RtI Implementation Tennessee Dept. of Educ.	http://tennessee.gov/Educ./speced/doc/101008seconf07.pdf
Self-Assessment for Readiness Planning Guide Kentucky Valley Educational Coop.	http://www.kentuckyvalley.org/test/default.asp?contentID=66
Teacher Planning Guide for RTI Implementation Delaware Dept. of Educ.	http://www.doe.state.de.us/infosuites/staff/profdev/rti_new.shtml

Table 2: *Coding categories, definitions, and example items by RtI readiness domain*

Domain I: Stakeholder Readiness

Category	Definition	Example
Administrative support	The school administration supports the change.	The school and district administration have approved the implementation of RtI in the school.
Administrator active involvement	The school administration is actively involved in the change process.	The building administrator is actively involved in the planning and implementation of RtI as a member and contributor to the efforts of the core planning team.
Team Action	A purpose, action, or task the core planning team is expected to perform.	The planning team has established a system of communication for disseminating information about school needs, proposed changes, and outcomes of implementation.
Team feature	The specific feature or characteristic of the core planning team.	A building-level core planning team includes the following members, at minimum: Administrator, general education teacher, special education teacher, content area specialists.
Teacher/ school staff	A role or feature of the teaching or school staff.	At least 80% of the teaching staff is committed to the implementation of RtI.
Parents/ community	Efforts to involve, inform or address parents or community members	There is a plan for how parents will be involved in their child's education at the universal, targeted, and intensive systems levels.

Domain II: Resource Readiness

Category	Definition	Example
Resources	Resources allocated for the change process.	Sufficient time is allocated for staff to collaborate in designing, implementing, and evaluating interventions.
Professional Development	Training, coaching, or mentoring of school staff.	Quality professional development that moves beyond awareness to the conceptual underpinnings of RtI.

Domain III: Systems Readiness

Category	Definition	Example
Mission, goals, priorities	Consideration of the mission, priorities, and commitment to change.	The school mission and school improvement goals have been revisited and revised, as needed, to be consistent with the RtI approach.
Policy	The rules and regulations by which the school operates.	Policies and procedures that comply with state regulations are defined regarding the use of RtI, including the use of RtI for special education eligibility determinations.
School organizational climate	Beliefs/ attitudes among stakeholders and influences on the school.	Staff members understand how their roles are likely to change within an RtI system, they accept their roles, and feel prepared to practice within those roles.

Domain IV: Data Readiness

Category	Definition	Example
Needs Assessment	Assessment of systems overtime to inform the continuous change process.	As part of an annual staff needs assessment plan, data are gathered from all staff to assess needs, level of support and commitment, and impact of RtI on staff.
Data Gathering System	Systems/ procedures for gathering data.	An efficient and reliable data management system allows for access to benchmarking and progress monitoring data.
Data Analysis Procedures	Student data are regularly analyzed and used to inform decision making.	Benchmarking and screening data are analyzed quarterly to identify students in need of additional support and annually to monitor the effectiveness of universal or core programs.
Dissemination of Data	Data are disseminated to stakeholders.	Data are shared with the teaching staff on a quarterly basis with an emphasis on celebrating successes and brainstorming solutions to continued challenges.

Domain V: Evaluation Readiness

Category	Definition	Example
Implementation Plan	A plan outlines steps in implementation of the schoolwide change.	A multi-year strategic action plan (e.g. three to five years) exists and is used to guide the phased implementation of RtI overtime.
Implementation Fidelity	A plan to assess how well the implementation plan is being implemented.	A continuous observational system is in place to verify that Tier II and III interventions and supports are implemented as intended.
Evaluation Plan	A plan for evaluating outcomes and continued needs.	On an annual basis, the level of implementation of RtI in the school is evaluated and this information is used to plan for implementation in the coming year.

Domain VI: Student Supports Readiness

Category	Definition	Example
Universal Academic System	An aspect or characteristic of universal academic programs.	A research based core curriculum is delivered by qualified staff in general education settings and meets the needs of 80% of students in all areas targeted by the school's RtI plan.
Group and Individual Academic System	An aspect or characteristic of targeted and intensive academic supports.	A variety of evidence-based interventions and supports provided by appropriately trained staff are readily accessible at tiers II and III.
Behavioral System	An aspect or characteristic of behavioral supports.	Three to five schoolwide behavioral expectations are defined, taught, practiced, and positively reinforced in all settings.

A comprehensive literature review was conducted to identify the components of readiness as drawn from the literature on RtI implementation and organizational systems change. A team of four researchers collaborated in this process. Initially, each researcher developed a list of critical components independently. Then, the researchers corroborated their lists, merged them, and developed a single list of the components. The components converged into six interrelated domains with sub-categories that were used to guide the coding process (see Table 2).

Following a one-hour training session, three graduate students coded one readiness tool using the coding scheme depicted in Table 2. Following this first training session, there was 81% agreement across the three coders. It was apparent that individual items tended to assess multiple readiness domains making coding decisions difficult. Following a second training session, each coder then coded three additional tools. There was a mean of 90% agreement across the three coders for these three tools (86%, 85%, and 100% agreement, respectively). For the four tools included in inter-rater agreement analysis, there was 88% agreement across three coders.

To identify exemplary RtI readiness assessment tools, the authors ranked all 21 tools according to the breadth and depth of their coverage of the six readiness domains. Initially, each author created a rank-ordered list. Then, the authors compared their lists and merged them to produce a single rank-ordered list.

RESULTS

Content analysis included 759 items across the 21 RtI readiness assessment tools. There was a range of 14 to 102 items per tool, with a mean of 69 items per tool (SD= 36.14). Overall, most tools addressed the following readiness indicators: student supports (95%), data-based decision making (95%), resources (90%), professional development (86%), and the roles and responsibilities of the core planning team (81%) and the teaching staff (81%). Conversely, the tools least often addressed the

following readiness indicators: school climate (5%), evaluation plan (24%), school systems (24%), and needs assessment (29%). There were no readiness assessment tools that included items representing all readiness indicators and some domains were assessed with greater depth and breadth than other domains as described below.

Stakeholder readiness. Across the 21 readiness assessment tools, there were 230 items that assessed the roles and responsibilities of stakeholders, representing 30% of all items. All 21 tools included items that assessed stakeholder involvement, with a mean of 10.95 items per tool (SD= 9.22). The majority of items assessed the roles, responsibilities, and actions of the planning team (54%). For example, Minnesota's RtI Center's tool includes the following: "Is there a building team designed to help general education teachers and parents solve student problems?" The remaining items addressed considerations related to the administrator (16%), the school staff (17%), and families or the community (13%). The Vermont Department of Education's tool includes the following items: "The building administrator assumes an active role of leadership on the Educational Support Team" and "Families participate in the Educational Support Team process in a meaningful way." Florida's tool also included: 'Faculty/staff support and are actively involved with problem solving/RtI."

Resource readiness. There were 143 items assessing resources and professional development, representing 19% of items across the sample of tools. Of the 21 tools, 19 included items assessing this domain, with a mean of 6.8 items per tool (SD= 4.50). The majority of items assessed the professional development needs of stakeholders (67%). For example, the Colorado Department of Education's tool includes the following: "Professional development addresses relevant areas such as collaborative decision making, research-based instructional practices, and progress monitoring techniques." The remaining items assessed the allocation of resources to support the planning and implementation of RtI (33%). For example, Montana's tool includes the following items: "Availability of instructional programs and materials" and "allocation of staff to provide various interventions."

Systems readiness. Content analysis of the readiness assessment tools revealed only 19 items assessing the systemic readiness for school policy, priority, and climate to shift with the implementation of an RtI model, representing less than 3% of all items. Of the 21 tools, 10 (48%) included items that assessed this domain, with a mean of less than one item per tool (SD= 1.18). There were 11 items assessing the school mission or priorities (58%), seven items assessing school policy (37%), and only one item assessing school climate (5%). RtI in Pennsylvania's tool included the following item: "School district policies and procedures have been revised, as necessary to implement the RtI model." The Oregon Department of Education's tool included the following: "Understanding of and commitment to a long term change process (3 or more years)." In the area of school climate, Intervention Central's tool included the following item: "Creates an atmosphere in which teachers feel welcomed and supported."

Data readiness. Analysis of item content revealed 165 items assessing readiness for data-based decision making, and this represented 22% of the total items. All 21 tools included items that assessed this domain, with a mean of 7.86 items per tool (SD= 6.45). However, there were no tools that included items assessing all indicators for data-based decision making. The majority of items focused on the data management system (44%) and data analysis procedures (38%). For example, Minnesota's RtI Center's tool includes the following items: "Is there a universal screening system for making general education decisions about the growth and development of all students' literacy skills?" The remaining items addressed the dissemination of data to stakeholders (12%) and conducting a needs assessment prior to implementation of RtI (6%). For example, the Vermont Department of Education's tool includes the following items: "Overall student performance data is shared regularly with the community," and "Screening data is shared with families and partnerships are encouraged for students found to be at risk for academic failure."

Evaluation readiness. There were 65 items assessing RtI implementation, which represented 9% of all items. Of the 21 tools, 18 included items that assessed this domain, with a mean of 3.1 items per tool

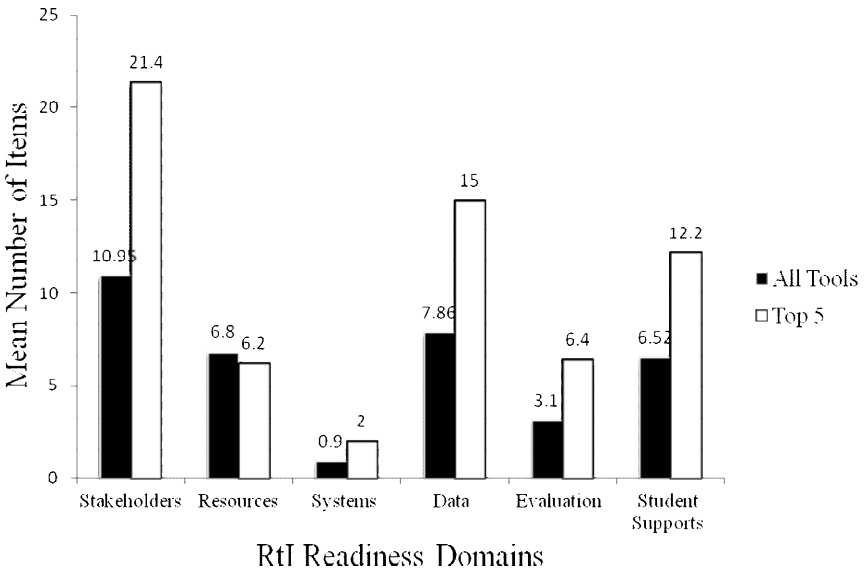
(SD= 3.58). Most items focused on the RtI implementation plan (51%). The remaining items assessed implementation fidelity (37%) and the evaluation plan (12%). For example, Florida's tool includes the following item: "A strategic plan exists and is used by the School-Based Leadership Team to guide implementation of RtI." The Vermont Department of Education's tool includes the following: "Instruction in the core curriculum is characterized by a high degree of fidelity and integrity of implementation."

Student supports readiness. Across the 21 tools, there were 137 items assessing readiness for a tiered model of academic and/or behavioral support, accounting for 18% of the total data set. All 21 tools included items that assessed readiness for implementing tiers of support, with a mean of 6.52 items per tool (SD= 5.38). The majority of items assessed readiness for universal academic supports (51%), followed by targeted and intensive academic supports (40%). For example, Delaware's tool includes the following: "Core reading and math curricula align with state content standards and grade level expectations," There were fewer items assessing behavioral supports (9%). Florida's tool includes the following items: "Tier 2 Behavioral Supplemental Instructional/ Programs clearly identified."

Top Five Tools

Five tools emerged that addressed all six domains and used the greatest number of items to assess the readiness domains. They are: *Illinois RtI: District Self-Assessment* (Illinois State Board of Education); *RtI Readiness and Implementation: Self Assessment Tool* (Pennsylvania Department of Education; *Responsiveness to Instruction: A Self Assessment Tool* (Vermont Department of Education; *School Readiness for RtI Implementation* (Minnesota RtI Center); and *Self Assessment of Problem Solving Implementation: Florida Problems Solving/RtI Project*. The top section of Table 1 lists the recommended tools and their web links in no particular order. Figure 1 presents comparisons across the six readiness domains in the mean number of items for the top five RtI readiness tools and all 21 tools included in the study. On average, with the exception of the Resources readiness domain, the top five tools used more items to assess each readiness domain.

Figure 1: *Mean number of items per domain for all RtI readiness tools and the top five tools*



DISCUSSION

The main purpose of the present study was to evaluate the alignment of commonly used RtI readiness assessment tools to the components of readiness found in the RtI and organizational systems change literature bases. A content analysis of the tools revealed that most tools addressed student supports, data-based decision making, resources, professional development, and the roles and responsibilities of the core planning team and the teaching staff. The tools least often addressed school climate, evaluation plan, school systems, and needs assessment. There were no readiness assessment tools that included items representing all readiness indicators.

Overall, the tools included in the present analysis were strong in the assessment of the fundamental processes necessary to implement an RtI model. As such, these tools appear to be useful for assessing readiness for implementation of the "nuts and bolts" of supports within an RtI model. However, the tools were weak in the assessment of school climate, policy, and the systemic features of schools. In that the purpose of these tools is to assist in the creation of readiness for change, it is important to note they focus little on factors needed to build initial readiness for change.

To provide practical guidance for school-based teams, five tools were identified as exemplary readiness assessment tools based on their greater depth and breadth of assessment in the readiness domains (See Figure 1). It is recommended that RtI teams consider using one of these five assessment tools in their initial planning process. Given findings of this study, the core planning team may need to supplement the selected assessment tool with additional questions that assess school climate, organization, and policy and other systemic factors relevant to readiness for RTI (See Table 2 for hypothetical readiness indicators listed under the domain of systems readiness). It should be noted that the majority of tools were located on state or local education websites and little information was available regarding their development or intended use. In that the instruments used terminology specific to each state, adaptation at the item level would be necessary for widespread use.

There are several limitations to the present study and our larger knowledge base related to readiness for RtI implementation. Although several thorough searches were conducted to locate tools, additional tools are likely to exist that were not identified by our search procedures. It was noted that individual readiness items often assessed multiple readiness indicators which made forced-choice coding decisions challenging. Additionally, the reader should not be left with the impression that a readiness tool could substitute for the knowledge and expertise necessary in planning for RtI. The substantial professional development and expert consultation necessary to shift to an RtI model cannot be replaced with a tool, no matter how comprehensive. In fact, it is apparent that professional development would be necessary to effectively use such tools and translate the results into an appropriate action plan for implementation.

In conclusion, assessment of readiness for systems change in RtI implementation is in its infancy. There is a critical need to develop research-validated practices in this area. Specifically, information is needed to determine the technical adequacy of commonly used readiness assessment tools, as well as the practical utility of such tools for planning teams. Additionally, the distinction between readiness assessment and implementation evaluation should be clarified. Indeed, numerous readiness tools included in this analysis purported to meet both needs. Researchers should explore the similarities between the assessment of readiness and implementation and the potential for one tool to meet both evaluative needs in a continuous school improvement process.

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TOC

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Tiered Models of Integrated Academic and Behavioral Support: Effect of Implementation Level on Academic Outcomes

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This exploratory study examined (a) Integrated Systems Model (ISM) implementation levels, and (b) the effect of implementation of the academic and behavioral components of ISM on student academic outcomes. Participants included 2,660 students attending six suburban elementary schools. Hierarchical linear regression was conducted using a control block of three school demographic variables (initial student oral reading fluency from one year prior, percentage of economically disadvantaged students, and percentage of non-minority students), and a block of three implementation variables (academic, behavioral, and overall implementation of ISM). A mean of 55% overall implementation was found, with higher implementation of the behavioral than the academic components of ISM. Three significant regression models were found, and a positive effect of academic implementation emerged. Limitations and implications are discussed.

KEYWORDS: RtI, PBS, Integrated Systems Model, Implementation Integrity, Reading Outcomes

School psychologists are acutely aware of the subpar academic achievement trends that have been persistently identified in U.S. schools. As an example of these trends, recent data suggest only 29% and 32% of all 8th grade students scored at or above the Proficient range on the National Assessment of Education Progress Reading and Mathematics tests, respectively (Snyder, Dillow, & Hoffman, 2008). These figures are more troubling for African American and low-income students (Snyder, et al., 2008). Additionally, Snyder et al. (2008) found that only 13% of adults scored at or above the Proficient level on prose literacy tasks, suggesting a pervasive inability to search, comprehend, and use information from written texts. These indicators provide a glimpse into the academic needs of many American students.

In response to such startling trends, the past decade has been characterized by the realization that an intensified focus on improving academic outcomes for all students was warranted. This realization served as an impetus behind the development of federal legislation such as the No Child Left Behind Act (NCLB, 2001), which requires schools to demonstrate accountability for the academic outcomes of all students, ensure that students are taught using evidence-based or scientifically based practices, and provide services to prevent or intervene upon academic problems. The Individuals with Disabilities Education Act (IDEA, 2004), the most recent version of the federal legislation governing services for students with disabilities, also emphasizes enhanced accountability, inclusiveness, and high quality intervention.

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Currently, students are entering schools with increasingly diverse needs, and, at the same time, teachers are expected to hold them to higher academic standards. Given the increased challenges of student diversity, coupled with the failure of traditional models to improve student assessment outcomes, educators have begun searching for new ways to serve students more effectively within this accountability paradigm. Two initiatives aligned with this goal are Response to Intervention (RtI) and School-wide Positive Behavior Support (SWPBS).

RtI has been defined broadly as, "…the practice of (1) providing high-quality instruction/intervention matched to student needs and (2) using learning rate over time and level of performance to (3) make important education decisions (Batsche et al., 2006). Essentially, it represents one framework for improving academic and/or behavioral outcomes for all students, although the primary focus has been on the former. Using RtI, students are exposed to increasingly intense interventions in a tiered model of support. Based on their individual response to intervention, as measured by ongoing data collection, important educational decisions are made. If a student demonstrates limited progress after multiple iterations of individually matched interventions – or if appropriate progress is made only with an intense and highly individualized level of intervention – a referral for special education may be made.

SWPBS, also a comprehensive educational initiative designed to improve student outcomes, aims to promote appropriate behaviors of all students and enhance the capacity of schools and families to design positive environments for students (OSEP Center on Positive Behavior Interventions and Supports, 2004). Similar to RTI, SWPBS involves a tiered system of prevention and intervention. SWPBS typically involves six components: (a) identifying a statement of purpose, (b) establishing schoolwide behavioral expectations, (c) teaching schoolwide expectations, (d) encouraging expected behaviors, (e) discouraging problem behaviors, and (f) engaging in data collection and decision making (Lewis & Sugai, 1999).

Given the shared features of RtI and SWPBS, researchers and educational professionals have increasingly been interested in the promise of streamlining the process by incorporating features of both initiatives into a comprehensive school program designed to improve academic and behavioral competencies. This interest has been fueled by some research demonstrating causal paths between academic and behavior outcomes for students (e.g., Kellam, Mayer, Rebok, & Hawkins, 1998). Often referred to as an Integrated Systems Model (ISM), this type of initiative involves implementing tiered models of academic and behavioral support in a simultaneous and streamlined fashion within a school, district, or state.

Of particular interest in this study was Ohio's Integrated Systems Model (initially referred to as OISM, although because this descriptor has since been discontinued it will be referred to as ISM hereafter). Ohio's ISM was a prevention-based model designed to improve academic and behavioral outcomes at the district, school, classroom, and individual student levels. It is based on six Key Features: (a) Administrative Leadership, (b) Collaborative Strategic Planning, (c) Scientifically based Research, (d) Data-based Decision Making, (e) Academic and Behavioral Supports across Three Tiers, and (f) Culturally Responsive Practices. Building- and district-level teams facilitate the design, implementation, and evaluation of ISM within a school district (Graden, Stollar, Poth, 2007).

Although research on the effectiveness of RtI, SWPBS, and ISM continues to evolve, results thus far are promising. For example, research has demonstrated positive student outcomes associated with implementation of RtI (e.g., Burns, Appleton, and Stehouwer, 2005) and SWPBS (e.g., Barrett, Bradshaw, & Lewis-Palmer, 2008). Although more limited in number and scope, initial findings also suggest improved outcomes associated with ISMs (e.g., Lane & Menzies, 2002; McGlinchey & Goodman, 2008; McIntosh, Chard, Boland, & Horner, 2006).

Findings by Stewart, Benner, Martella, and Marchand-Martella (2007) suggest that the outcomes of ISM surpass the outcomes of other models. Stewart et al. (2007) conducted a meta-analysis to evaluate the impact of three types of three-tiered models on academic and behavioral outcomes: academic only, behavior only, and integrated. Based on their inclusion criteria, 11 intervention studies were included in

the meta-analysis. Researchers found small effect sizes for the reading-only (Zr=.30) and behavior-only (Zr=.18) models on reading outcomes coupled with large effect sizes for integrated models (Zr=.53) on reading outcomes. Although the differences between models were not statistically significant, the results suggest that integrated models may produce larger improvements in reading skills than the academic or behavioral models in isolation. In terms of behavioral outcomes, a moderate effect size was found for integrated models (Zr=.31), whereas a small effect size was found for behavior models (Zr=.28) and no effect was found for reading models. Overall, the effect of integrated models on reading outcomes emerged as stronger than the effect on behavioral outcomes.

Although unanswered questions remain, these preliminary results suggest the promise of such models for improving student academic outcomes. However, many schools have struggled with implementation of these initiatives. Because RtI, SWPBS, and ISM represent comprehensive educational reform, they require vast shifts in the leadership, roles, practices, and beliefs of educators at all levels. Unfortunately, previous research has shown that implementation of reform initiatives is difficult (e.g., Berends, Bodilly, & Kirby, 2002; Mann, 1978) and low implementation levels have resulted in disappointing outcomes (e.g., Datnow, Borman, & Stringfield, 2000; Nunnery, 1997). Although some studies have included implementation data to supplement their findings, there are no known studies that have systematically verified this relationship between quality of implementation and student outcomes for ISMs.

Statement of the Problem

Despite the promise of ISM for improving student academic achievement, there remain several unanswered questions regarding implementation and utility. First, preliminary evidence suggests that ISMs may be associated with improved student academic outcomes. However, given the limited nature of this research coupled with the resources required to implement ISMs, these findings warrant further replication.

Second, there has been little research examining the implementation quality of ISM initiatives (Jimerson, Burns, & VanDerHeyden, 2007). Implementation integrity (i.e., implementation fidelity) is a term that refers to the degree to which specific procedures of a program are implemented as intended (Gresham, Gansle, Noell, Cohen, & Rosenblum, 1993) and defines the quality of implementation of a particular program. Given the difficulties schools often encounter when implementing comprehensive changes, it is important to determine whether degree of implementation integrity is related to degree of improvement in student outcomes. Furthermore, it is important to identify the unique contribution of implementation of different components of ISM to academic outcomes.

Purpose of the Study

The purpose of this study was to (a) examine current implementation levels for ISM, and (b) examine the effect of implementation of the academic and behavioral components of ISM on student academic outcomes. This investigation represents a preliminary study using a limited number of suburban schools during a one year period. Given the limited evidence in extant literature, this modest focus was deemed to be an appropriate starting point. Academic outcomes, as opposed to behavioral outcomes, were selected as the target for the study because (a) schools are increasingly concerned with academic outcomes, given the pressures of NCLB; (b) research has suggested that integrated models have a more profound effect on academic outcomes (e.g., Stewart et al., 2007), and (c) improving academic competencies may result in improved behavioral outcomes (e.g., Kellam et al., 1998).

Two research questions were developed to address the purposes of the study: (1) At what levels are schools implementing the academic and behavioral components of ISM, and (2) Does school implementation level for the academic and/or behavioral levels of ISM predict student academic outcomes?

METHODS

Participants

Participants included all students in grades one through five who were given Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Oral Reading Fluency (ORF) spring benchmark assessments during the 2006-2007 and 2007-2008 school years and attended schools implementing Ohio's ISM that met predetermined inclusion criteria. Specifically, participating schools must have done all of the following during the 2007-2008 school year: (a) implemented ISM, (b) received consultative support for ISM through their State Support Team (SST), (c) had the Implementation Evaluation Tool (IET) administered to the school, (d) administered DIBELS ORF benchmark assessments to its students, and (e) agreed to participate in the study. More information on the specific features of Ohio's ISM implementation can be found in Graden et al. (2007) and Stollar, Poth, Curtis, and Cohen (2006).

Although eight Ohio schools met these criteria, students attending two schools were eliminated in order to obtain a more homogeneous sample after a series of one-sample t-tests revealed significant differences across five of six key demographic variables (e.g., average daily enrollment, percentage of economically disadvantaged students, percentage of non-white students performance index [an Ohio measure of student achievement], percentage of students with a disability, and percentage of teachers with a master's degree). These two schools were the only urban schools. Because a representative sample of all schools implementing ISM was not feasible, eliminating these schools minimized the likelihood of finding differences attributable to vast differences in demographic variables that we did not have the data to control for, while concurrently maximizing the likelihood of correctly generalizing results to the circumscribed suburban population. Thus, this study focused specifically on suburban schools.

Due to these modifications, the final sample consisted of 2,660 student participants attending six suburban schools. The final participant count of 2,660 is less than the total average daily enrollment for the schools because some students attended the school in only 2007 or 2008 and thus could not be used in the study. See Table 1 for mean demographic information for participating schools versus state averages.

Table 1: *Comparison of Mean Demographic Information for Participating Schools versus Statewide Averages (Ohio Department of Education, 2009)*

Demographic Characteristic	School Mean	Statewide Mean
% Economically Disadvantaged Students	23.35	37.7
% Non-White Students	10.07	24
% Students with a Disability	10.75	14.6
Performance Index Score*	96.58	92.3
% Teachers with a Master's Degree	73.80	n/a
Average Daily Enrollment	587.33	n/a

n/a indicates data were not available
* a score of 0-120 that reflects the achievement of every child enrolled for the academic year based on statewide assessments

Measures

Implementation Evaluation Tool (IET). The IET (State Improvement Grant State Steering Committee, 2007) is an instrument designed to assess quality of implementation of ISM. At the school level, this tool is used to (a) determine the features of ISM currently in place within the school, (b) identify areas for improvement in collaborative strategic planning, and (c) compare implementation across school years (IET manual, 2007). The IET was modeled after the School-wide Evaluation Tool

(SET-2; Sugai, Lewis-Palmer, Todd, & Horner, 2001), an instrument designed to evaluate the presence or absence of critical features of School Wide Positive Behavior Support (SWPBS) and monitor implementation progress. An ad hoc evaluation subcommittee formed out of the State Improvement Grant State Steering Committee developed the IET in an effort to evaluate the success of ISM implementation in Ohio schools. The content and structure of the original version of the IET were twice revised, most recently in 2007, to better assess implementation. The 2007 version of the IET, which was used in this study, was documented to have interrater agreement of .94 through a process in which two employees of an educational agency independently completed the IET on one of the six participating schools and compared results (Shroeder, email communication, 2009).

Administration of the IET involves collection of multiple pieces of data from the school, including: building team planning meeting schedules, notes, action plans, and data reports; school handbook; discipline code of content; written continuum of responses for behavioral violations; lesson plans; curriculum maps; end of the year reading summary reports; end of the year discipline summary reports; professional development plans and agendas; instructional integrity checklists; and materials from a sample of individual student intervention cases (IET Manual, 2007). The individual administering the IET (an outside consultant or doctoral student trained on the IET) also arranges a half-day visit to each school to conduct observations and semi-structured interviews with administrators, teachers, and students. Based on this information, each item on the IET is ranked on a zero to two Likert-scale using specific scoring criteria. Both raw and percentage scores can be derived from the IET, although the latter were used in the study in order to make better comparisons across IET phases.

Dynamic Indicators of Basic Early Literacy Skills (DIBELS). DIBELS (Good & Kaminski, 2002) ORF measures are standardized, individually administered, curriculum based assessments of accuracy and fluency with connected text (University of Oregon Center on Teaching and Learning, 2008). Administration involves a trained examiner having a student read aloud for one minute from three grade-level passages. The outcome is the median number of correct words read per minute from the three passages based on specific scoring criteria (University of Oregon Center on Teaching and Learning). Although not a comprehensive assessment of overall academic proficiency, ORF was chosen as a measure because it is used widely to evaluate the effectiveness of instruction and is seen as an indicator of a broader set of literacy skills. A number of studies and research overviews have supported the technical adequacy of ORF assessments as a practically significant measure of reading achievement (e.g., Tindal, Marston, & Deno, 1983; Vander Meer, Lentz, & Stollar, 2005).

Procedures

This study relied on existing data sets previously collected by Ohio's State Improvement Grant (SIG) coordinator and participating schools. A designee of the SIG coordinator contacted the building representative from each school that met the predetermined inclusion criteria to determine if their contact information could be released to the primary researcher. The primary researcher contacted building representatives who provided permission and asked for written consent for the release of the data. Upon receiving IRB approval, data were released and entered into SPSS 14.0 software by the primary researcher and were rechecked for accuracy by an undergraduate psychology research assistant familiar with using SPSS and trained in data entry.

Data Analysis

For the first research question, descriptive statistics were computed to gather more information about the characteristics of the variables. For the second research question, hierarchical linear regression was used to examine the relationship between the predictor variables and the criterion variable. The criterion variable was the raw student-level DIBELS ORF score for the spring 2008 benchmark assessment. There were two sets of predictor variables. First, there was a control block that included three predictor variables that we wanted to control for in the analyses. Within this block were variables representing, (a) initial student reading performance, as defined by DIBELS ORF scores from one year prior (i.e., 2006-

2007 school year), (b) the percentage of economically disadvantaged students in the school, and (c) the percentage of non-minority students in the school.

There was a second block of predictor variables, which included the implementation variables. This block included three variables assessing overall school implementation level of the (a) academic components of ISM, (b) the behavioral components of ISM, and (c) overall ISM. Overall ISM implementation was quantified as the percentage of total points earned on the IET administered during the 2007-2008 school year. For the academic and behavioral variables, items that measured these components of ISM were first identified. Specifically, items including the terms "academic," "reading," or "literacy," in the absence of any of the behavioral terms were identified as the academic items. In contrast, items including the terms, "behavioral," "expectations," "consequences," and "behavior," in the absence of any of the academic terms were identified as the behavioral items. Six items on the IET exclusively assessed academic implementation and 11 exclusively assessed behavioral implementation.

Entering the predictors in two sets allowed us to determine if adding the three implementation variables in the second block improved the proportion of variance in the criterion variable significantly, above and beyond that explained by the demographic variables in the first block. Each block was analyzed in a stepwise fashion, meaning that each variable in the block is entered in sequence and only retained if it contributes significantly to the model, but the other variables in the model are then re-tested to determine whether they continue to contribute to the model and they are removed if they do not (Brace, Kemp, & Snelgar, 2006). This process maximizes the likelihood of ensuring only the smallest number of variables that contributed significantly to the model are retained (Brace et al., 2006).

RESULTS

Descriptive Statistics

Students attending the participating schools performed above the DIBELS benchmark goals across all grade-levels (see Table 2). Overall, the schools the students attended were found to be implementing 55.21% of the components of ISM as measured by the IET (range = 43% to 68%). Mean implementation of the behavioral components of ISM was 70.82% (range = 54.55% to 86.36%). Finally, mean implementation of the academic components of ISM was 59.52% (range = 33.33% to 91.67%).

Regression Analysis

The regression analysis produced three significant models. In the first model, initial ORF was found to significantly predict 2008 ORF scores, explaining 78.3% of the variance (see Table 3). In the second model, academic ISM implementation was found to significantly contribute to 2008 ORF scores when controlling for initial ORF (see Table 2). Finally, in the third model, behavior ISM implementation also significantly contributed to the criterion variable above and beyond the effects previously demonstrated (see Table 2). The percentage of economically disadvantaged students, the percentage of non-minority students, and the overall implementation variables were not significant contributors to the criterion variable.

Table 2: *DIBELS Oral Reading Fluency Raw Scores for Participants*

2008 Grade Level	2007 Raw Score *	2008 Raw Score	DIBELS Benchmark Goal**
1	38.01	65.46	40
2	60.91	99.75	90
3	103.93	117.34	110
4	119.80	132.17	118
5	126.69	138.22	124

*When interpreting 2007 results, remember that these scores represent the participants' performance one grade-level prior to their 2008 grade-level indicated in the first column.
**Benchmark score for the Spring assessment (three assessments per year model) provided by the University of Oregon Center on Teaching and Learning (2008)

Table 3: *Regression Results*

Model	Variable	*B*	*SE B*	β	*p*
1	ORF 2007 (initial ORF)	0.821	0.008	0.885	0.000
2	Academic implementation	0.045	0.018	0.022	0.015
3	Behavior implementation	-0.089	0.040	-0.021	0.025

DISCUSSION

Overall Implementation Levels

A mean overall IET score of 55% was found across the participating schools. An optimal score on the IET is not specified in the manual (Implementation Evaluation Tool Manual, 2007); however, the goal on the SchoolWide Evaluation Tool (SET; Sugai et al., 2001) – an instrument on which the IET is based – is 80% implementation. Consequently, 55% falls below an optimal implementation level. The observed suboptimal implementation level is not completely surprising given other research suggesting low levels of treatment integrity for student-level interventions (e.g., Wickstrom, Jones, Lafleur, & Witt, 1998) and school level comprehensive change initiatives (e.g., Datnow et al., 2000). However, it should be noted that several participating schools did exceed the 80% criterion. In addition, there appeared to be wide variability in implementation integrity levels between schools.

Academic Outcomes and Implementation Level

Results suggest that school academic implementation level does significantly and positively contribute to reading performance in the current sample of suburban schools when controlling for several demographic variables that have the potential to confound the results. This is consistent with prior research supporting an effect of comprehensive school reform implementation level on student outcomes (e.g., Datnow et al., 2000; Nunnery, 1997; the Urban Institute, 2007), as well as case study research suggesting that implementation of several critical features of RTI can successfully improve reading achievement (e.g., Alonzo, Tindal, & Robinson, 2008). Implementation of the academic components of ISM explained more variability in reading outcomes than did implementation of the behavioral components. This is not unexpected given previous research suggesting the implementation of academic models of support has a stronger effect on academic outcomes than the implementation of behavioral models of support (Stewart et al., 2007).

Although behavioral implementation did also contribute to the outcome above and beyond academic implementation, albeit to a lesser degree, findings also indicate that results were not in the expected direction. This is surprising given evidence of a relationship between schoolwide tiered behavioral support implementation and improved student reading outcomes (e.g., Lassen, Steele, & Sailor, 2006). We might expect that as behavioral competencies are addressed and improved, students will experience less lost instructional time and be able to devote more time and cognitive resources toward learning. However, it may be that behavioral issues were not a contributing factor to many of the readers' deficits and therefore level of implementation of the behavioral supports did not notably impact their reading performance. Also, there was less variability in the behavioral implementation levels, which might have impacted the results. Finally, research suggests that suburban schools tend to have lower baseline rates of behavioral referrals and disciplinary actions than do some other school types (Noltemeyer & Mcloughlin, 2010). It may be that the baseline level of behavioral problems in these suburban schools was low enough across all schools that variations in the quality of implementation of the behavioral components of ISM did not have a profound effect on the behavioral outcomes of enough students to meaningfully impact mean reading performances. Unfortunately, we were not able to collect behavioral data in the participating schools to support or refute this hypothesis. Such elements should be part of future research endeavors.

Interestingly, overall implementation of ISM (i.e., all items on the IET) did not explain any additional variation of reading outcomes beyond implementation of the academic components. This is surprising given research suggesting integrated models of support produce more significant academic outcomes than academic models of support (Stewart et al., 2007). However, an important distinction between the Stewart et al. (2007) study and the current study may partially explain this difference. In the Stewart et al. (2007) study, schools were either implementing (a) academic only, (b) behavior only, or (c) integrated models of support. In this study, all schools were implementing integrated models, albeit to different degrees of implementation for the different components.

Limitations

There are several limitations associated with the current study. First, the design limits the degree to which one can assume a causal relationship between ISM implementation and student outcomes. Second, the sample of schools used in the study needs to be considered when interpreting the results. Because implementation was measured on the school level, the small number of schools participating in the study resulted in limited diversity in this predictor variable. In addition, this homogeneous sample also might evidence different findings than a heterogeneous sample including more diverse schools (e.g., urban schools) or those with lower academic achievement, and therefore results should be generalized with caution. These concerns limit the external validity of the study.

Also, concerns regarding the internal validity of the study exist, as the IET has not been sufficiently validated. For example, the predictive validity and concurrent validity have not been studied previously. Because the validity of the IET remains largely unexplored, the degree to which it accurately differentiates between levels of implementation and predicts future outcomes is unknown. In addition, the degree to which scores on the academic and behavioral components accurately reflected implementation of each component was not confirmed empirically. However, the items were deemed to theoretically load onto the behavioral and academic components through careful selection of inclusion criteria terms that reflect academic-only or behavior-only supports and through operational definitions used to ensure appropriate items were included for each component.

Implications for Practice

Despite these limitations, several implications for practice emerged from this study. First, an increased emphasis on enhancing ISM implementation is warranted. With a mean overall score of 55%, implementation of ISM emerged as less than desirable in this study. As previously mentioned, an optimal score was determined to be above 80%. It is important to note that positive effects of ISM implementation level on academic outcomes were found even when considering these suboptimal implementation levels.

Given current findings suggesting implementation levels may impact student outcomes – coupled with similar findings from research on other comprehensive school reform initiatives (e.g., Datnow et al., 2000; Nunnery, 1997; Urban Institute, 2007) – a renewed interest in enhancing implementation integrity appears warranted. Specifically, before deciding to implement ISM (or RtI or other systems-level changes), schools should create a plan for ensuring implementation is carefully monitored and addressed throughout the longevity of the initiative. Because high levels of academic implementation were associated with higher outcomes, it seems logical for schools to aim for meeting or exceeding a minimum implementation level of 80%, a value recommended by the SET (Sugai et al., 2001).

Although overall implementation levels may have been less than ideal, the mean performance on the behavioral components exceeded the academic components by over 10%. The reasons for this difference are unclear. It could be that the academic features are inherently more difficult to implement within schools' existing cultural, legal, and financial frameworks. Alternatively, the training and guidance received by these schools from consultants may have focused more specifically on the development of the behavioral components. Despite the reasons, it is important for schools not only to monitor overall implementation levels, but also behavioral and academic implementation levels.

It also appears that implementation of the academic and behavioral components of ISM have a differential impact on student reading outcomes. Results of this preliminary study suggest that if a school is seeking to improve student academic outcomes only (which is rarely the case), an initial focus on implementing the academic components may be justifiable *while concurrently building capacity to simultaneously implement academic and behavioral components*. However, it would be quite unwise to suggest abandoning the behavioral components of ISM. Prior research has demonstrated an effect of behavioral models of support on student academic and behavioral outcomes (Stewart et al., 2007). It is feasible that the unique limitations of the current study resulted in a failure to detect a similar effect. For example, it is possible that initially low levels of problem behaviors among the homogeneous sample resulted in an artificially reduced effect of implementation of the behavioral components of ISM on student outcomes.

Implications for Research

Several avenues for future research appear warranted. First, results of the study suggest that previous methods of evaluating the effectiveness of RtI, SWPBS, or ISM initiatives may need to be reconsidered. For example, most previous research examines the effects of implementation versus non-implementation on student outcomes. However, because ISM implementation levels substantially vary, it is important to examine the effect of *degree* of implementation on student outcomes. By aggregating this study's schools into one group of implementers, the differential effects of implementation would have been clouded. Future research should continue to consider implementation integrity as a continuous predictor variable.

In addition, it is recommended that future research use larger samples representing a larger number of schools and school types. If this is done, more sophisticated analyses will be possible that can better account for the nature structure students within schools. For example, because the participants were nested within schools that were compared based on the IET, multilevel modeling might be appropriate to use in examining the interaction between student DIBELS outcomes and school IET scores. This was not feasible in the current study due to the limited number of participating schools.

Additional research is also needed to explore the effect of *student-level ISM implementation* on student outcomes. Although this study was primarily concerned with the systemic implementation integrity of a comprehensive ISM program, it is also necessary to evaluate the outcomes of treatment integrity level for individual students in Tiers II and III. This type of research would be similar to that of Telzrow, McNamara, & Hollinger (2000), which explored the relationship between intervention integrity at the student-level and student outcomes in a related initiative.

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Preparing Teachers to Train Parents to Use Evidence-based Strategies for Oral Reading Fluency with Their Children

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Although there is promising evidence for parent-tutoring strategies for improving oral reading fluency, such parent tutoring programs are not widely used in schools. This study examined the effectiveness of providing parent training in school settings using teachers as trainers. An evidence-based reading package including listening passage preview, repeated reading, error correction, and performance feedback was developed. Three first-grade teachers were trained using video-training, written instructions, and practice with peers. Eight parents reviewed a similar manual and video and then met with teachers to practice the strategies and develop a tutoring plan. Parents then implemented the reading fluency tutoring package at home for 8 to 9 weeks. Student progress was monitored weekly using curriculum-based measurement of oral reading fluency within an A-B design. Results show oral reading fluency improved when treatment fidelity was good. Future applications of evidence-based tutoring practices and considerations for implementation and sustainability in school-based settings are discussed.

KEYWORDS: evidence-based practices, oral reading fluency, parent tutoring, teacher trainers, treatment fidelity.

Although reading is essential to academic success, 40% of fourth-grade students have oral reading fluency (ORF) difficulties (i.e., U.S. Department of Education, 2002). Collaborative efforts between home and school are needed to improve reading outcomes in the early grades. Students demonstrate higher reading achievement when parents and teachers have mutual goals and similar beliefs about how to help with reading (Msengi, 2007). In addition to increased achievement, home-school collaboration improves teachers' satisfaction and parents' confidence in supporting home learning (Christenson, 1995; King, King, Rosenbaum, & Goffin, 1999). Despite these benefits and federal recommendations for home-school collaboration (e.g., Elementary and Secondary Education Act/NCLB, 2001), teachers receive little or no training in how to engage parents as partners in the educational process (McCutchen & Berninger, 1999; Shumow & Harris, 2000). Therefore, it is important to examine training methods that can be used to prepare teachers to work with parents to enhance reading outcomes.

Parent tutoring in reading has been identified as a promising intervention for improving academic performance based on the criteria developed by the Task Force on Evidence-Based Interventions in School Psychology (Fishel & Ramirez, 2005). Specifically, large effect sizes were found for the effectiveness of parent tutoring on second through fifth grade students' ORF. ORF is defined as the ability to read connected text accurately, quickly, and with proper expression (National Institute of Child Health and Human Development [NICHD], 2000). When students are not fluent readers, their attention is focused on individual letter sounds and words, thereby detracting from their overall comprehension (NICHD, 2000). Fortunately, there are evidence-based practices that are easy to implement and can be used by parents to improve their children's ORF, such as listening passage preview (Daly & Martens, 1994), repeated readings (Rashotte & Torgenson, 1985), phrase drill error correction (O'Shea, Munson, & O'Shea, 1984), and performance feedback (Eckert, Dunn, & Ardoin, 2006). Combining these strategies has resulted in parent tutoring packages that have improved reading fluency (e.g., Daly, Shroder, & Robinson, 2001/2006;

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Gortmaker et al., 2007). Specifically, students in first through fifth grade have shown gains in ORF on tutored passages (Duvall, Delquadri, Elliott, & Hall, 1992), curriculum reading passages (Resetar, Noell, & Pellegrin, 2006), high word-overlap passages (i.e., passages with 70-85% of same words as a tutored passage; Persampieri et al., 2006), and commercially available passages (Gortmaker et al., 2007) following four to five weeks of tutoring with individualized treatment packages developed from the strategies described earlier.

When trained, parents can successfully provide evidence-based tutoring, but teachers typically only provide general recommendations to parents about ways to support reading (e.g., reading books, going to the library), as opposed to providing training in specific strategies (Shumow & Harris, 2000). Yet, the results of the National Reading Panel indicated that informal or silent reading programs do not improve student reading, particularly for struggling readers (NICHD, 2000). Additionally, teachers interviewed by Shumow and Harris (2000) viewed parents as responsible for initiating home-school collaboration. Consequently, it is not surprising that parents report a lack of support from teachers about how to effectively help at home (Epstein & Hollfield, 1996). To enhance student outcomes, teachers and parents would benefit from receiving training in home-school collaboration and evidence-based reading strategies.

Although parent training has been conducted by researchers or support staff (e.g., school psychologists) in the extant research, teachers are in the most natural position to serve as trainers, as they have more frequent contact with parents and are primarily responsible for the student's instruction. Yet, teachers need training to serve in this role (McCutchen & Berninger, 1999; Shumow & Harris, 2000). Little is known about the effectiveness of parent tutoring when teachers serve as parent trainers. To be successful, it is essential that quality training for both tutor trainers (i.e., teachers) and the tutors themselves be delivered. Behavior skills training which includes instruction, modeling, practice, and feedback can be effective at improving procedural adherence to an intervention protocol, having been shown to improve teacher behavior management (Plavnick, Ferreri, & Maupin, 2010), and parent use of guided compliance (Miles & Wilder, 2009). However, the effort and time required of teachers and parents to participate in the training program may be prohibitive for some because of competing responsibilities like work, child activities, and parenting.

Research supports the use of technology for increasing the efficiency of parent training (Slider, Noell, & Williams, 2006). Video training has been shown to be an effective and acceptable means for teaching skills to parents, teachers, and staff (Blom-Hoffman, O'Neil-Pirozzi, Volpe, Cutting, & Bissinger, 2006; Macurik, O'Kane, Malanga, & Reid, 2008). There are many advantages of video-based training, including standardization of training, reduced cost and increased efficiency for school staff, and the opportunity for participants to observe individuals similar to themselves model the strategies.

Although research has supported family literacy programs (Epstein, 2001), and parent tutoring in the area of reading (Fishel & Ramirez, 2005), the availability of parent tutoring for ORF in school settings with teachers as trainers is unknown. The purpose of this study was to bridge the research-to-practice gap by training teachers to engage parents in the use of evidence-based tutoring strategies. To maximize the accessibility of parent training, we sought to develop efficient training and tutoring procedures. This study combined video training, standardized written instruction, and a brief practice session in which parents were able to receive teacher feedback. In addition, materials designed to prompt trainees to use the strategies (e.g., laminated steps, graph) were provided to enhance generalization of skills and ease of implementation. Using single-case design elements, we evaluated the effects of the training package on teacher and parent skills and the subsequent effect of parent tutoring on students' ORF. The effects of the training and tutoring were examined using an A-B case-study design. Three research questions were addressed: (a) Do teachers' skills in providing parent training improve following training?, (b) Do parents use more evidence-based practices for improving ORF following training by teachers?, and (c) Does students' ORF improve following structured parent tutoring?

METHOD

Participants

This study received prior approval by the Human Subjects Institutional Review Board at the University of Nebraska-Lincoln. The school administrator at a parochial, pre-kindergarten through eighth-grade Midwestern school (student population approximately 580) also approved the study. Three first-grade teachers (all female and White) at the school were recruited by the school administrators. The researcher met with teachers who expressed interest in participating to provide a description of the study and review the information presented in the consent form (e.g., procedures, time requirements, benefits, risks). Teacher consent was obtained prior to participation.

Eight first-grade students (mean age, 6.75; range, 6 to 7) and their parents (seven mothers, one father) were recruited by the participating teachers and agreed to participate. Specifically, teachers identified students in their classrooms who needed additional support with ORF and contacted their parents to determine their interest. Teacher 1 recruited four parents and teachers 2 and 3 each recruited two parents for participation. Prior to participation, parental consent and child assent were obtained. Seven of the students were White and one was Hispanic-American. All of the students and parents were native English speakers. None of the students were receiving special education services; however, toward the end of the study, a special education evaluation was initiated for Nichole.

Measures and Data Collection

Oral reading fluency. Correctly read words (CRW) per min and errors per min were calculated in first-grade AIMSweb progress monitoring-probes (Howe & Shinn, 2002) to assess the generalized effects of parent tutoring. Words were scored as correct if the student pronounced the word correctly within 3 s. Words were scored as errors if the student omitted, mispronounced, substituted, or failed to produce a word within 3 s. Three randomly selected probes were administered each week. The median CRW per min and errors per min was the score for a session. The mean rate of growth per week was also calculated by subtracting the last data point from the first data point for each phase and dividing by the number of weeks in the phase.

Skill and treatment fidelity. Procedural checklists (available upon request) were developed based on evidence-based practices for improving ORF and were used to assess the percentage of skill steps completed by teachers and parents. Specifically, teachers were rated on their skill in providing parent training and parents were rated on their skill in tutoring. To derive an exact percentage of treatment adherence, sessions were audio recorded and scored by a trained, impartial rater using the corresponding procedural checklist. The percentage of steps completed per session was calculated by dividing the number of steps completed by the total number of steps to be followed.

Social validity. Social validity of the training and tutoring procedures was assessed using the Intervention Rating Profile-15 (IRP-15; Martens, Witt, Elliott, & Darveaux, 1985) and the Child's Intervention Rating Profile (CIRP; Witt & Elliott, 1985). The IRP-15 assesses general perceptions of the acceptability of an intervention by having parents and teachers rate each statement on a 6-point Likert scale, ranging from 1 (strongly disagree) to 6 (strongly agree). The reported internal consistency of the IRP-15 is .98 (Kratochwill, Elliott, & Busse, 1995; Martens, Witt, Elliott, & Darveaux, 1985). Similarly, the CIRP assesses children's perceptions of the acceptability of an intervention using a 5-point Likert scale, ranging from 1 (disagree) to 5 (agree). Results are reported as the mean item ratings. Internal consistency for the CIRP ranges from 0.79 to 0.89 (Turco & Elliott, 1986; Witt & Elliott, 1985).

Evaluation Design and General Procedures

A-B designs were used to assess the effects of the teacher and parent skills training, and the effects of parent tutoring on students' ORF. During baseline, teacher skills were evaluated using the procedural checklist during role play sessions with graduate research assistants serving in the roles of parent and

child. Teachers were asked to model how they would teach a parent to tutor their child to improve reading fluency. Following baseline, teachers received training via a manual and video created by the first author (described below and available upon request). Teachers were asked to practice training parents in role-play interactions with one another. Generalization of the teacher's skill in training parents was assessed during parent training sessions with participating families.

During the baseline phase, parents were asked to record themselves helping their child with reading three times per week. Following baseline, teachers met individually with parents to provide direct skills training. After the training was complete, parents were asked to record themselves helping their child with reading using the tutoring program three to four times per week at a convenient time at home. The parent-tutoring phase lasted a mean of 8.6 weeks (range, 7.6 to 9.7). Student performance was also measured for 2 additional weeks following structured tutoring during which tutoring materials were not provided. Students' ORF was assessed weekly in progress monitoring probes during baseline and parent tutoring.

Intervention

Teacher skill training. Teacher training included review of a manual and video and practice with peers. The manual and 30-min video (available upon request) included the following segments: (a) benefits of parent involvement and tutoring, (b) introduction to the evidence-based tutoring program (see Table 1 for the steps of the tutoring program), (c) considerations for implementation, (d) steps for parent training, and (e) how to monitor student progress. The segments included descriptions, specific steps, and demonstrations. After reviewing the materials, the teachers were asked to practice the parent training procedures three times in role-play sessions with one another alternating roles as the teacher, parent, and child. After each role-play, the individuals playing the role of parent and child assessed the teachers' completion of the skill steps following the outlined training steps (protocol available upon request) and discussed the steps completed correctly and incorrectly. Each role-play session lasted approximately 15 min.

Table 1: *Brief Description of the Tutoring Steps*

Step	Description
Attention and Praise for good behaviors	Parents were asked to give attention and praise for good behaviors including reading fluently, practicing difficult words, sitting nicely, and answering comprehension questions.
Pre-Check	The parent timed the student reading the passage for 1 minute and graphed the number of CRW and errors per min.
Show	The parent read the passage as the student followed along with his or her finger (i.e., Listening Passage Preview). As the student listened to the story, the parent watched to ensure the student was following along and guided the student to the correct location if he or she was not following along accurately.
Practice with Feedback (1)	The student practiced reading the story aloud two times (i.e., Repeated Readings) with feedback. While the student was reading, the parent read any error words to the student, had the student repeat the word, and then had the student continue reading. Following each reading, the parent corrected student errors by reading each error word, and then having the student read the word and the phrase that includes the word three times (i.e., Phrase Drill).
Practice with Feedback (2)	
Post-Check	The parent timed the student reading the passage for 1 minute and graphed the number of CRW and errors per min. The parent and student compared the number of CRW and errors per min from the pre-check to the post-check.
Discuss	The parent and student discussed the passage using post-reading strategies. Parents were given a list of general questions to ask following reading including: who was the story about, what happened in the story, what did you like about the story, and have you ever done something similar to the characters in the story. Parents were encouraged to have their children use complete sentences when responding to the questions.

Parent skill training. Following the completion of teacher training, each teacher trained two to four parents to use the tutoring program. Prior to meeting with the teacher, parents reviewed a manual and 30-minute video similar to that of the teachers (i.e., two sections were eliminated: steps for parent training and how to monitor student progress). During the meeting (approximately 30 min), the teacher, parent, and student first discussed why reading is important to them and why they would like to provide tutoring or practice reading at home. Next, they reviewed the tutoring program that was presented in the video and manual. The teacher provided a rationale for each step included in the program. Next, teacher and parent selected intervention components and developed a tutoring plan that included when, where, and how frequently tutoring was to occur. After planning for implementation of the tutoring program, the parent practiced the tutoring program with the child. During and following the practice, the teacher provided feedback to the parent by telling the parent the steps completed correctly and reviewing steps omitted or completed incorrectly. At the end of the session, parents were given a binder with materials for implementation (i.e., books, graph, timer, fidelity checklist) and asked to return the tutoring binder to school each week.

Parent tutoring using the evidence-based tutoring program. Once parent training was complete, parents were asked to use the tutoring program with their child at least 3 days per week for 15 to 20 min for 7 to 9 weeks. To begin each tutoring session, the parent placed the necessary materials (e.g., pencil, book, and graph) on the table and started the audio recorder. Then, the parent implemented the tutoring program following the five general steps outlined in Table 1: pre-check, show, practice with feedback, post-check, and discussion. For each tutoring session, the parent completed a tutoring record, which included the days they tutored, the length of the session, and the steps of the program that they completed.

The binder with the completed materials was sent to school with the child weekly and given to the experimenter. The experimenter removed the completed materials, added new materials, including four individually selected books, and sent the binder home with the child. To select books of appropriate difficulty level, the experimenter had each student read selections from books for 1 min each while assessing the percentage of correctly read words. Books in which the student read between 93 and 97% accuracy were selected for tutoring.

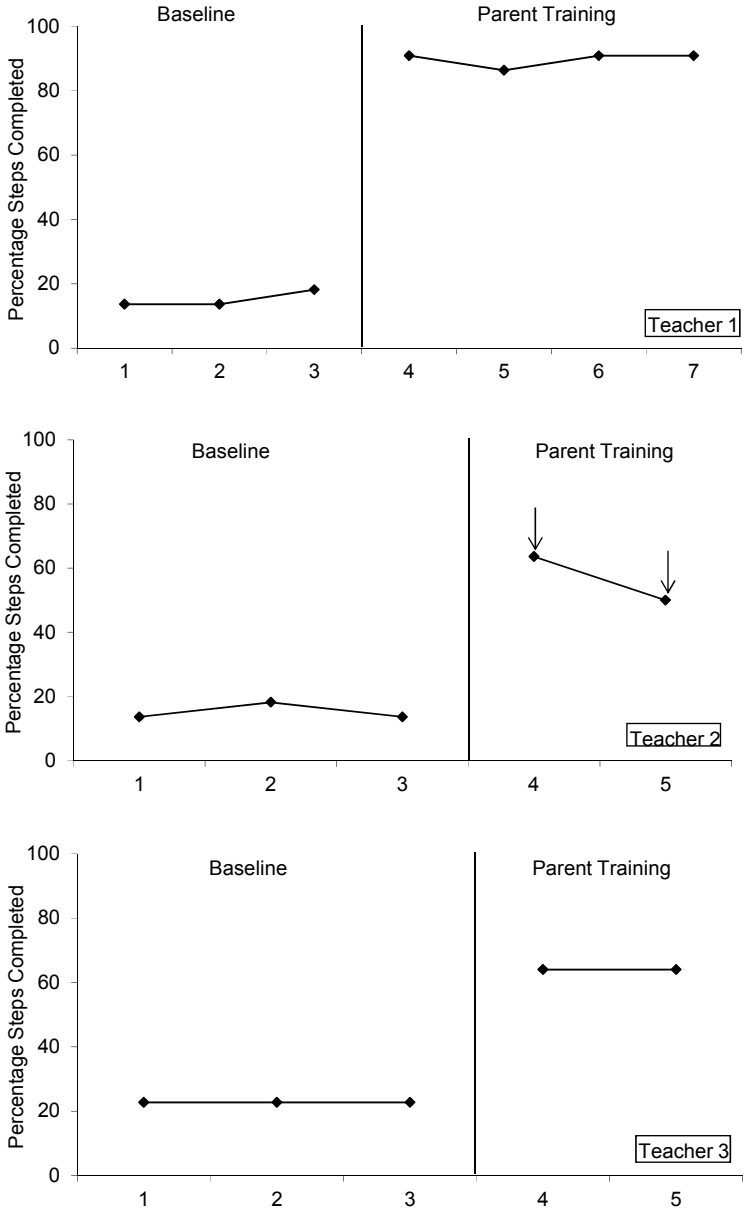
Interrater agreement. A trained, independent rater scored randomly selected reading passages and teacher skill in training for interrater agreement. The independent observer listened to 32% of the recorded reading assessments conducted by the experimenter and recorded CRW and errors per min. Interrater agreement was calculated for ORF measurements by dividing the number of agreements (i.e., both observers scored the same word as correct or incorrect) by the number of agreements plus disagreements and multiplying the result by 100 to obtain a percentage. Mean interrater agreement was 98% (range, 78 to 100%). For teacher skills, 50% of the sessions were scored for interrater agreement by dividing the number of agreements (i.e., both observers scored the same component as completed or not completed) by the total number of agreements plus disagreements and multiplying the result by 100. The mean interrater agreement was 86% (range, 82 to 91%).

RESULTS

Teacher Parent Training Skill and Fidelity

The percentage of parent training steps completed by each teacher during role play baseline meetings and intervention parent training meetings is presented in Figure 1. During baseline, teachers completed a mean of 18% of the parent training steps (Teachers 1 and 2 = 15%; Teacher 3 = 22%) with little to no variability in response from one session to the next. There was an immediate and consistent change in the percentage of steps completed across teachers following the training. Teachers completed a mean of 78% of the steps during meetings with participating parents and students. Whereas Teacher 1 implemented a mean of 90% of the steps during the parent trainings, Teachers 2 and 3 implemented a mean of 67% and 64% of the steps, respectively. Fidelity of parent training was classified by the authors as either high fidelity (i.e., 80-100% steps completed), moderate fidelity (i.e., 60-79), or low fidelity (<60%). Therefore, Teacher 1 provided training with high fidelity and Teachers 2 and 3 provided training with moderate fidelity.

Figure 1: *Percentage of parent training skill steps completed by each teacher during baseline and parent training sessions. Arrows indicate the data are based on 18 and 19 steps, as opposed to 22, as the audio recording was terminated prior to the end of the meeting and the steps could not be scored.*



Parent Tutoring Fidelity

Thirty percent of the recorded tutoring sessions were analyzed for parent tutoring behaviors. Table 2 shows summary data on parent use of the tutoring strategies prior to and following training. Given that Teacher 1 delivered training with high fidelity and Teachers 2 and 3 with moderate fidelity, the results for parent and student performance are organized according to the level of training fidelity.

Table 2: *Mean Percentage Fidelity of Tutoring Step Implementation Across Baseline and Post-Training Sessions by Parent and Level of Training Fidelity*

Teacher	Parent (Student)	Baseline	Post-Training
Teacher 1 (high fidelity)	Holly (Hannah)	22	60
	Nora (Nichole)	11	78
	Donna (Danielle)	--	--
	Tara (Tiffany)	15	88
	Total Mean Percentage	16	75
Teachers 2 and 3 (moderate fidelity)	Christine (Cory)	22	40
	Kristin (Karen)	22	39
	Ann (Andrew)	29	87
	Todd (Tanya)	11	42
	Total Mean Percentage	21	52

High fidelity. The results demonstrate that parents trained with high fidelity used few evidence-based tutoring strategies when asked to help their child with reading at home prior to training (i.e., mean of 16% of steps). Following training, the percentage of tutoring steps completed by parents trained with high fidelity increased to a mean of 75% (range, 60 to 88%). No data were available for Donna, as the recordings were not returned.

Moderate fidelity. Parents who received training with moderate fidelity completed a mean of 21% of the tutoring steps during baseline. After training, the parents completed a mean of 52% of the tutoring steps (range, 39 to 87%) following parent training. These parents failed to implement the second practice with feedback on the majority of the sessions.

Oral Reading Fluency

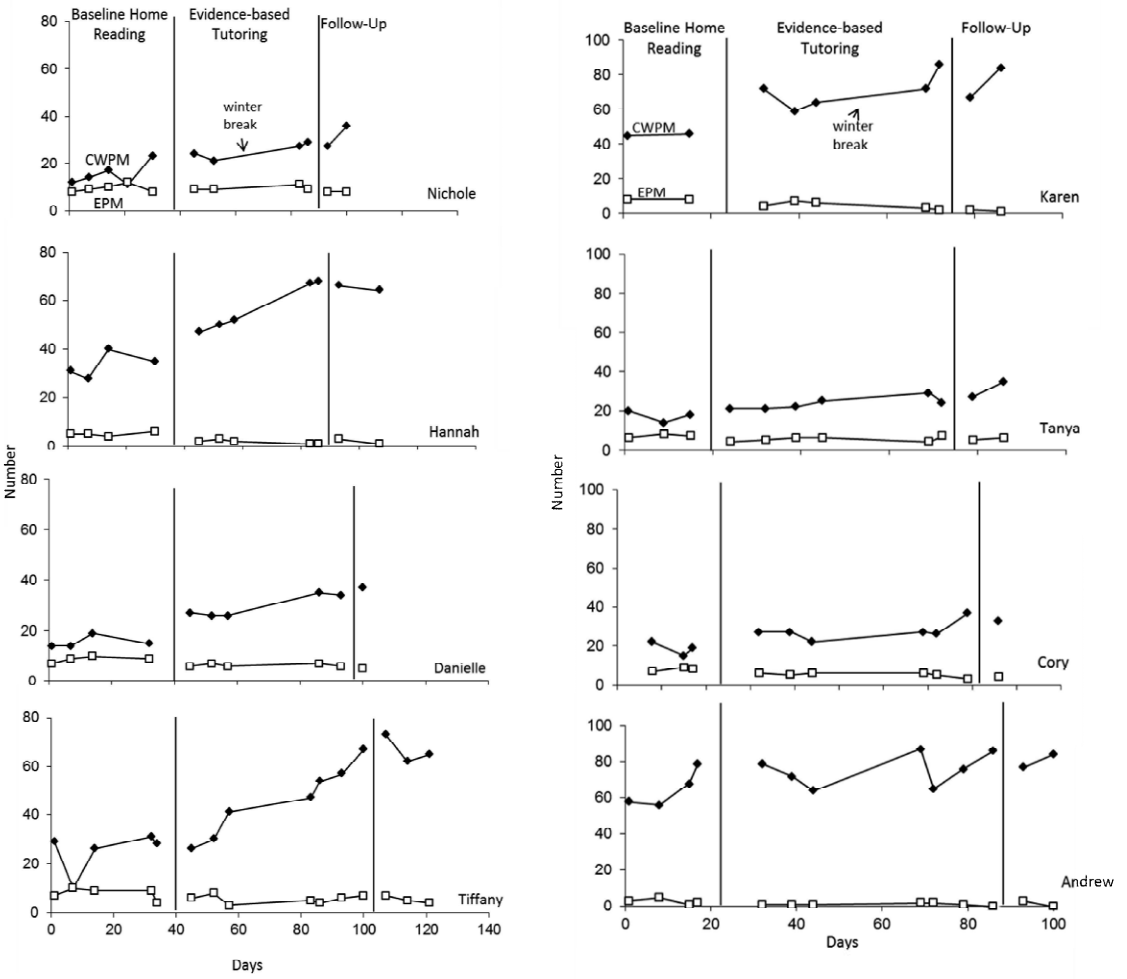
The number of CRW and errors per min during baseline reading sessions, evidence-based tutoring sessions, and follow-up sessions for each student are presented in Figure 2. With the exception of Andrew, all of the students' levels of ORF exceeded baseline levels during the tutoring and follow-up phases.

High fidelity. Visual inspection of the data shown in Figure 2 (left panel) indicates that students showed consistent performance during baseline, with the exception of Nichole who displayed an increasing trend. The students demonstrated a mean of 22.3 CRW per min (range, 15.4 to 24.8) with 7.7 errors per min (range, 5 to 9.4). Mean rate of growth per week was 0.9 words (range, -0.2 to 2.6). Upon implementation of the evidence-based tutoring program, the students demonstrated increases in level and trend in CRW per min. The number of CRW per min increased to a mean of 39.4 (range, 25.3 to 56.8) and the number of errors per min decreased to a mean of 5.8 (range, 1.8 to 9.5). Two of the students, Hannah and Tiffany, showed growth that surpassed the expected rate of 2 words per week for first grade students (Fuchs, Fuchs, Hamlett, Walz, & Germann, 1993). Specifically, Hannah increased by 2.7 words per week and Tiffany increased by 4.4 words per week. Nichole and Danielle showed more progress during the structured tutoring phase compared to baseline, but their rates of growth (i.e., 0.89 and 0.82 words per week) did not meet expected levels. During the follow-up phase, the mean number of CRW per min increased to 51.6 (range, 31.5 to 73) and errors per min decreased to 5.5 (range, 2 to 8). Although Hannah and Tiffany demonstrated a slight decrease during the follow-up phase, their ORF remained above baseline levels.

Moderate fidelity. During baseline, all of the students demonstrated stable responding except for Andrew, who showed an increasing trend (see right panel in Figure 2). Overall, during baseline students read a mean of 36.7 CRW per min (range, 17.3 to 65.3) with 6.4 errors (range, 2.75 to 8) and demonstrated a mean rate of growth of 1.7 words per week (range, -1.2 to 8.6). During evidence-based tutoring phase, the number of CRW per min increased to a mean of 49.4 (range, 23.7 to 75.6) and errors per min decreased

to 4 (range, 1.1 to 5.1). The mean rate of growth per week was 0.1 words (range, 0.4 to 1.8). None of the students met the expected growth rate for first grade students; however, Karen, Tanya, and Cory showed more positive, increasing trends in performance compared to baseline rates. During the follow-up phase, the mean number of CRW per min increased further to 54.1 (range, 31 to 77) and errors per min decreased to 3.5 (range, 1.5 to 5.5). Student performance remained above baseline levels with the exception of Andrew.

Figure 2: *Number of CRW and errors per min for each student whose parents were trained with high fidelity (left panel) and parents trained with moderate fidelity (right panel).*



Intervention Acceptability

Following completion of the study, the students completed the CIRP. Each item was read aloud to the student and the student rated the statements on a 5-point Likert-type scale. Analysis of student ratings revealed that the mean item rating across students was 4.3 (range, 3.2-5), indicating a high level of acceptability. Additionally, parents' and teachers' mean item ratings on the IRP-15 was 5.3 (range, 4.3-5.9) and 5.8 (range, 5.3-6), respectively. These results indicated a high level of acceptability of the procedures.

DISCUSSION

The purpose of this study was to examine the effectiveness of parent tutoring in a school setting with teachers as the parent trainers. Following the manual plus video training, teachers showed improvements in parent training, but provided training with varying levels of proficiency. Parents also demonstrated increases in tutoring skills, but those trained with higher fidelity provided tutoring with greater fidelity than those trained with moderate fidelity. Most importantly, consistent with previous research, implementation of evidence-based parent tutoring resulted in improvements in students' ORF, especially for those whose parents received high fidelity training (Gortmaker et al., 2007; Hook & DuPaul, 1999). Lastly, teachers, parents, and students rated the training methods and procedures and tutoring strategies as acceptable.

An interesting finding of this study was the variability in fidelity across teacher trainers and parent tutors and the impact of fidelity on students' ORF. To improve fidelity across trainees, researchers should examine more comprehensive and direct, yet practical and efficient methods for training teachers. For example, researchers might investigate the application of a pyramidal training model in which a group of teachers receive direct behavioral skills training and then serve as trainers for others in the school. Furthermore, to increase parent fidelity, researchers should more closely evaluate the ease of implementation and students' response to the strategies included in the tutoring program. Modifying and identifying alternative strategies to replace those that were not frequently used (i.e., phrase drill error correction) or produce a negative interactions between the parent and child may be warranted. In addition to further verification of the tutoring program, it appears necessary to examine practical strategies teachers could use to increase parents' fidelity of implementation such as ongoing communication with the parent via email or a home-school note.

A unique component of this study was the use of teachers as parent trainers. Preparing teachers to serve as parent trainers may lead to broader dissemination of evidence-based tutoring strategies for reading fluency. The training provided to the teachers was efficient and flexible, only requiring approximately 1.5 hours of time, and allowed teachers to study the materials at a time convenient to them (even outside of the school day). However, the data show that some teachers may require direct feedback from a skilled trainer to provide training to parents with high fidelity.

Another novel component of this study was the examination of parents' use of strategies prior to training. Although teachers often ask parents to read with their children to enhance reading development, little is known about what parents do without training. The results showed parents did not use evidence-based strategies when helping their children. Most notably, during baseline, none of the parents used repeated readings of the text which is viewed as an important component for improving reading fluency. The results from this study may be the first empirical data on parents' natural use of empirically supported intervention components.

Several limitations of this study should be noted. First, although the majority of students demonstrated increased growth in ORF following the implementation of structured tutoring, increasing trends in ORF prior to implementation of the program for Nichole and Andrew raise concerns about whether it was the tutoring program per se that resulted in improvements. In addition, the reliability of the parent fidelity data is unknown, as interrater agreement was not obtained. Furthermore, all parent training occurred within a two-week period, which caused a school break to interfere with data collection and precluded a more stringent experimental design (e.g., a multiple-baseline). Thus, the evaluation design was a case-study design with repeated measures over time. Whereas the use of objective, reliable, and valid performance indicators and replication across multiple subjects helped to increase the overall quality of the case study, the controlled case study fails to rule out threats to internal validity in a way that a true experimental design (e.g., a multiple-baseline design) can (Kazdin, 2011). Nonetheless, Kazdin pointed out that case studies are useful for developing "therapy techniques" (p. 5) and are a source of ideas that may stimulate more rigorously controlled research.

The greatest value of the present study may be its ability to encourage other researchers to examine methods for training more natural change agents (e.g., teachers) who have frequent contact with parents (and therefore potentially stronger relationships) to carry out parent tutoring. The current results indicate that this approach may prove fruitful. Researchers can refine the methods and add stronger experimental controls to isolate the effects of parent tutoring. For example, studies might be conducted to examine the effects of training teachers to a higher criterion of performance on parents' treatment integrity and child outcomes to examine if less variable outcomes can be achieved. Alternately, studies can be conducted to examine whether a more collaborative approach to intervention selection might improve results. In the current study, teachers and parents were trained to use an experimenter-derived ORF intervention. With more in-depth training, teachers and parents might develop individualized tutoring programs by selecting from a list of evidence-based strategies, which may increase parents' subsequent adherence to the tutoring protocol.

Second, the majority of the parent participants appeared to be motivated and involved in his or her student's education prior to implementation of the tutoring program; however some parents may need additional motivation to use a tutoring program. For example, Danielle's mother failed to return materials and did not appear to implement the program during the intervention weeks. Encouraging teachers to provide ongoing performance feedback to parents on implementation and sharing student growth in ORF may increase parent fidelity of implementation (Hagermoser-Sanetti, Luiselli, & Handler, 2007).

Given the unfortunate statistics on student reading performance at the national level, schools are in need of methods to enhance student reading development. This study provided an evaluation of the impact of parent tutoring on students' reading fluency by preparing teachers to train parents as tutors. Additional research on parent tutoring in school settings is important to effective dissemination of evidence-based tutoring practices. Further refinement and evidence for parent training and parent tutoring procedures would be beneficial, as such findings may provide schools with a meaningful way to collaborate with parents and improve students' reading fluency.

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TOC

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TOOLS FOR PRACTICE

TOC

No-Suicide Contracts with Suicidal Youth: Mental Health Professionals' Perceptions and Current Practice

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Commonly used in clinical and medical settings, no-suicide contracts (NSCs) solicit commitment from suicidal individuals not to attempt suicide. The prevalence of community and school-based Mental Health Professionals' (MHPs) use of NSCs with suicidal youth (SY) is unknown. Additionally, minimal feedback is available regarding MHPs' current practice and perceptions of implementing NSCs. Likewise, school and agency policy directing intervention with SY is not well described, or clearly understood. Of 326 individuals attending Utah's Annual Youth Suicide Prevention Conference, 243 completed questionnaires (74.5% participation rate) assessing perceptions and current practice related to NSCs. Of these questionnaires, 229 were completed by MHPs who specifically worked with youth under the age of 18 years. These questionnaires were included in data analysis. When intervening with SY, half of participants reported using NSCs. However, only 3.5% of participants ($n = 8$) reported knowledge of formal *written* school district or community mental health agency policy that offered guidelines for implementing NSCs. Implications for clearly specifying current policy to guide interventions with SY are discussed.

KEYWORDS: no-suicide contract, child, adolescent, mental health professional, suicide prevention policy.

Worldwide, approximately 3,000 individuals complete suicide daily and approximately 20 times this number of individuals survive suicide attempts (World Health Organization [WHO], 2011). Annual deaths resulting from suicide exceed the number of deaths from homicides and wars combined (WHO, 2004).

Prevalence of Youth Suicide

For U.S. youth ages 10-24, suicide is the third leading cause of death, each year accounting for approximately 4,400 deaths and 149,000 emergency room visits for attempted suicide (Centers for Disease Control and Prevention [CDC], 2009). Additionally, the prevalence of completed and attempted suicides are underestimated, the cause of injury or death erroneously documented as *accidental* or subsequent to high-risk activity (e.g., automobile accidents, accidental drug overdoses, falls, drownings). Based on data from the 2009 U.S. *Youth Risk Behavior Survey*, 13.8% of ninth through 12th-grade students seriously considered attempting suicide in the previous 12 months; 10.9% made a plan to complete suicide; and

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6.3% attempted suicide (CDC, 2010, p. 9). From a teacher's perspective – considering these numbers in a high school classroom of 30 students – over the past 12 months, four students seriously considered attempting suicide, three made a plan to complete suicide, and two students attempted suicide.

These numbers reflect the current prevalence of suicidal ideation and planning among youth. Additionally these numbers represent desperate youth contemplating and taking desperate action to escape physical and emotional pain. Voicing medical and mental health professionals' sentiment, Weiss (2001) stated, "The management of the suicidal patient is one of the greatest clinical challenges facing mental health professionals" (p. 414).

An indication of difficulties preceding suicide, over 90% of individuals who completed suicide struggled with depression and/or other forms of mental illness and substance-abuse disorders (National Institute of Mental Health, 2010). Another contributing risk factor for suicide completion is alienation from social support (Cash & Bridge, 2009; Taylor, Gooding, Wood, & Tarrier, 2011). One example of social alienation linked to increased suicide, 63% of all Utah youth suicides were completed by males registered in the juvenile justice system (Moskos, Halbern, Alder, Kim, & Gray, 2007).

Suicide Prevention

Noting the prevalence and impact of youth suicide, medical and mental health professionals (MHPs) identify youth suicide as a major public health problem (Gould, Shaffer, Fisher, Kleinman & Morishaima, 1992; National Institute of Mental Health, 2010; U.S. Department of Health and Human Services [DHHS], Public Health Service, 2001). In 1999, the U.S. Surgeon General proposed a national strategic plan to address suicide prevention, including youth suicide prevention (U.S. DHHS, Public Health Service, 2001). More specifically targeting school settings, in 2008, Gene Cash, then president of The National Association of School Psychologists (NASP) made a *call to action* to prevent youth suicide.

Often described as a preventable cause of death, a permanent solution to a temporary problem, suicide leaves survivors feeling guilt and wondering how they might have more effectively intervened to prevent such tragic loss. Suicide's far-reaching grasp forever alters lives of surviving family members, friends, teachers, schools, and communities. Furthermore, the massive weight of disenfranchised grief following a youth's suicide adds to survivors' difficulty in healing and moving forward (Balk, Zaengle, & Corr, 2011).

The desire to prevent youth suicide is keenly felt among MHPs who work with youth in school and community settings (Greydanus, Bacopoulou, & Tsalamanios 2009; Miller & Eckert, 2009). In particular, prevention efforts are critical in secondary schools because, in comparison to younger children, adolescents are at a much greater risk for attempting and completing suicide (Daniel & Goldston, 2009).

Facing the challenge of intervening with SY, school-based MHPs repeatedly indicate insufficient graduate pre-service training to adequately and confidently intervene during crisis situations (Allen, Jerome, et al., 2002; Allen, Burt, et al., 2002; Debski, Spadafore, Jacob, Poole, & Hixson, 2007; King, Price, Telljohann, & Wahl, 1999). Additionally, the vast majority of interventions with suicidal youth are not considered evidence-based due to a lack of research utilizing controlled studies (Daniel & Goldston, 2009). Daniel and Goldstein noted, "There are insufficient data from controlled trials to recommend one intervention over another for the treatment of suicidal youth..." (2009, p. 252). Unfortunately, this leaves MHPs to routinely implement interventions that are neither data-based nor proven effective in deterring suicidal thoughts and actions. Although currently considered controversial, one such commonly promoted intervention is the use of *no-suicide contracts* (Miller & Eckert, 2009).

No-Suicide Contracts (NSCs)

The use of NSCs originated in an adult clinical out-patient study by Drye, Goulding, and Goulding (1973). They recommended evaluators ask suicidal patients to make the statement: "No matter what

happens, I will not kill myself, accidently or on purpose, at any time" (Drye et al., 1973, p. 172). These researchers professed that patients' verbal commitment or refusal to commit helped assess level of suicide risk, reflecting the seriousness of patients' intention to complete suicide. They also noted benefits of shifting responsibility to patients, lessening the emotional burden previously shouldered by MHPs. Although this study was later criticized on numerous points, nonetheless Drye et al. initiated verbal NSCs, forging a new way of conceptualizing patients' responsibility for self-harm. Their original verbal intervention eventually morphed into current-day written NSCs.

Though NSCs' content and wording may vary depending on client's age and situation, NSCs commonly rely on bilateral agreement between a client and MHP or adult in position of authority (Buelow & Range, 2000; Drew, 1999; Farrow & O'Brien, 2003; Kelly & Knudson, 2000; Weiss, 2001). The client commits not to act or follow through on self-destructive impulses. Typically, NSCs explicitly state the identified individual agrees *not* to attempt suicide or direct harm toward self in any way. After this statement, the client and MHP designate a specific timeframe for abstaining from self-harm. As a backup plan, the MHP lists emergency contact numbers for the individual to call in the event of increased suicidal ideation, self-harm, and suicidal behavior. Additionally, the individual and MHP outline a plan of action, offering guidance and supportive strategies to further protect the individual from self-harm. Concluding the contract, the individual and MHP sign the document, formally agreeing to previous statements. The contract is then copied, one copy given to the individual and one copy to the MHP (Buelow & Range, 2000; Poland & Lieberman, 2002).

Evidence base for NSCs. After searching and finding *no* solid empirical evidence supporting the effectiveness of NSCs, Kelly and Knudson (2000) countered the use of this commonly used intervention. Across time, similar complaints have been voiced against NSCs (Farrow & O'Brien, 2003; Garvey, Penn, Campbell, Esposito-Smythers, & Spirito, 2009; McMyler & Pryjmachuk, 2008; Miller, 1999; Miller, 2011). After conducting a literature review of empirical studies and legal cases related to NSCs, Garvey et al. (2009) concluded: "Overall, empirically based evidence to support the use of the contract for safety in any population is very limited, particularly in adolescent populations" (p. 363). They also warned, "A contract should never replace a thorough assessment of a patient's suicide risk factors" (p. 363).

McMyler and Pryjmachuk (2008) reviewed 23 publications investigating the effectiveness of NSCs. Ten articles described empirical research and 13 described opinion-based support. Based on their review, they concluded that potential benefits associated with NSCs, such as ensuring check-ins with patients and facilitating exploration of suicidal thoughts, could be achieved by other means, such as interviews, observations, and assessments to detect suicidal ideation. They cautioned, NSCs were "at best, ineffective and, at worst, harmful" (McMyler & Pryjmachuk, 2008, p. 520). In particular, they warned that practitioners should not depend on NSCs to ensure clients' safety.

School psychologists' perceptions of NSCs. An article currently available on the NASP website, *Times of Tragedy: Preventing Suicide in Troubled Children and Youth, Part II* (NASP, 2002), offers eight tips for school personnel and crisis team members who work with SY. The fifth tip specifically refers to NSCs. Although the following quote identifies NSCs as effective in preventing youth suicide, NASP does not cite research supporting this claim.

> *No-suicide contracts have been shown to be effective in preventing youth suicide. In cases where the suicide risk is judged to be low enough not to require an immediate treatment (e.g., there is only ideation and no suicide plan), a no-suicide contract is still recommended to provide the student with alternatives should their suicide risk level increase in the future. Such a contract is a personal agreement to postpone suicidal behaviors until help can be obtained. The contract can also serve as an effective assessment tool. If a student refuses to sign, they cannot guarantee they will not hurt themselves. The assessment immediately rises to high risk and the student should be supervised until parents can assume responsibility in taking the student for immediate psychiatric evaluation*. (National Association of School Psychologists, 2002, "Tips for School Personnel," 5th tip)

Also published in NASP resources and publications, several applied researchers with extensive school-based experience refer to positive aspects of NSCs (Brock, Jimerson, Lieberman, & Sharp, 2004, p. S9-35; Lieberman, Poland, & Cassel, 2008; Lieberman, Poland, & Cowan, 2006). Speaking from personal experience, these authors identify benefits associated with assessment of suicidal risk, more specifically the benefits in using NSCs as one piece of a larger treatment intervention plan.

In regard to youth suicide, Miller and Eckert (2009, p. 160) identified controversies surrounding NSCs (verbal and written). They noted that although this practice is common, particularly in outpatient settings, there are opposing opinions regarding the efficacy of NSCs in preventing students from attempting or completing suicide. Opponents warn that when individuals sign NSCs, MHPs may assume a false sense of security and subsequently lower their guard, decreasing their vigilance in monitoring suicidal risk (Goin, 2003).

PURPOSE OF STUDY

Although suicide is the third leading cause of death among youth ages 10-24, it is preventable. Community and school-based MHPs working with SY are challenged to identify the seriousness of a student's suicidal intent; determining the student's emotional stability and degree of hopelessness; assessing whether the student has a plan to inflict self-harm; and deciding if the student has plausible means to carry out plans of self-destruction. These judgments then set into action a host of preventive responses aligned with the student's level of risk and situational needs, most importantly keeping the student safe and emotionally Supported. School-based MHPs – including school counselors, school psychologists, and school social workers – also coordinate and implement strategies to provide ongoing follow-through and follow-up with SY, parents, school staff, and outside agencies (if deemed necessary).

MHPs are commonly encouraged to use NSCs as an intervention and assessment tool to determine suicide risk. However, ongoing debate and research reviews have placed NSCs under a critical lens of inspection. Based on recent publications, researchers and practitioners question the efficacy of NSCs in preventing self-harm and suicide (Garvey et al., 2009; Miller, 2011). In particular, this debate over the effectiveness of NSCs has not been carefully considered and resolved in regard to responding to SY, particularly in clarifying school-based treatment protocol and aligning practice with current research findings and recommendations.

As a model for school districts and community agencies working with youth, Utah is currently creating a state manual for youth suicide prevention, intervention, and postvention. In gathering information for this manual, the debate over how to use (or not use) NSCs prompted the authors to investigate the literature and to elicit feedback from Utah's community and school-based MHPs who intervene with SY. Regarding NSCs, information gathered from this survey will assist the authors in more clearly identifying current practice and prevailing attitudes of MHPs.

RESEARCH QUESTIONS

The following questions were included in the survey to help identify and describe Utah's MHPs' perceptions and practices related to NSCs with SY.

1. Do Utah's MHPs report using NSCs with SY?
2. Are Utah's MHPs aware of existing policies regarding no-suicide contracts?
3. When working with SY, to what extent do Utah's MHPs agree or disagree with using NSCs?
4. What reasoning underlies Utah's MHPs' agreement or disagreement in regard to using NSCs?

METHOD

A questionnaire was administered during Utah's annual statewide conference on youth suicide prevention, held December 3, 2010 in Provo, Utah. This one-day conference provided training relevant to Utah's MHPs who work with school-age youth. A two-page questionnaire (one sheet of paper, front

and back) and a pen were inserted into each attendee's conference packet. During the conference's opening session, attendees were invited to complete the enclosed questionnaire. Additionally, to promote a higher return rate, during conference breakout sessions participants were reminded to complete the questionnaire. Participants placed completed questionnaires in drop boxes located at the conference registration desk.

The paper-pencil questionnaire was prepared by the primary author and three members of Utah's suicide prevention conference planning committee. Prior to the conference, this questionnaire was approved by Brigham Young University's Institutional Review Board (IRB) committee. The questionnaire consisted of three sections: (a) demographic information, (b) items considered for inclusion in Utah's proposed *State Suicide Prevention Manual*, and (c) working with suicidal students. Time to complete the survey ranged from 10 to 20 minutes.

This study focused on the first and third sections of the questionnaire. For the demographic portion, participants were asked to either select from a provided list of optional responses (circling selected responses) or write a short response (fill in the blank). Participants circled response options describing the following demographic descriptors: (a) participant's gender (*male or female*); (b) age group or groups of youth the participant worked with (*preschool; K-6 grades; 7-8 grades; 9-12 grades; or NA, I do not work with youth*); (c) assisted in developing youth suicide prevention strategies or policies (*yes or no*); and (d) experience working with SY (*yes or no*). The demographic section also requested participants to write in responses describing (a) age, (b) job title, (c) school district/community agency, (d) number of years providing mental health services, (e) number of years working in school settings, and (f) number of years working with youth (including both in and outside school settings).

This study focused on participants' responses to five questions contained in the questionnaire's third section, *Working with Suicidal Students*. Table 1 describes these five questions, response options associated with each question, and how each question aligned with specified research questions. Four of these five questions required participants to circle or check provided response options. One question (open-ended) asked participants to describe their reasoning underlying agreement or disagreement to using NSCs.

Table 1: *Working with Suicidal Students: Research Questions' Alignment with Survey Questions and Response Options*

Research questions	Survey questions	Response options
Do Utah's MHPs* report using no-suicide contracts with youth who are suicidal?	1. Have you made a "no-suicide agreement/contract" with a student? (Also referred to as safety plan, no-suicide agreement/contract, no-harm agreement/contract, etc.)	*Yes* or *No* (circle response)
Are Utah's MHPs aware of existing policies regarding "no-suicide" contracts?	2. Does your school or district suggest or require using a no-suicide agreement/contract?	*Yes, No, Not Sure* (circle response)
	3. If yes (to question #3), describe the policy:	*formally written; generally assumed/unwritten; not sure* (circle response)
When working with suicidal youth, to what extent do Utah's MHPs agree or disagree with using "no-suicide" contracts?	4. Do you agree/disagree with using no-suicide agreements/contracts when working with students who are suicidal?	5-point Likert scale anchored with *Strongly Disagree* (1) and *Strongly Agree* (5)
What reasoning underlies their agreement or disagreement in regard to using "no-suicide" contracts?	5. (referring to question #4) Explain your reason for agreeing/disagreeing.	Open-ended, write in response

Note. MHP is an abbreviation for Mental Health Professional.

PARTICIPANTS

Of the 326 MHPs attending Utah's annual Suicide Prevention Conference, 243 completed conference questionnaires (74.5% participation rate). Of the completed questionnaires, 229 were completed by MHPs who worked with students/children younger than age 18. Data from these questionnaires were analyzed for this study. The 14 questionnaires that were not included were completed by individuals who reported no prior experience working as a MHP (e.g., principal, teacher, or unemployed). These surveys were excluded from the study because this study focused on MHP's perceptions.

Of the 193 participants who reported their gender, 73.1% indicated they were females and 26.9% indicated they were males. Ages of participants ranged from 22-74 years of age (M = 43.35; SD = 11.61).

Of the 229 participants, 187 (81.7%) reported working in school settings and 42 reported not working in schools (18.3%). Those not working in school settings reported working in community agencies such as detention centers, foster care, youth treatment centers, etc. Of the 229 participants, 212 (92.6%) reported working with youth; 15 participants (6.6%) reported not currently working with youth and 2 (.9%) did not respond to this question.

For those working in school settings, the average number of years employed in school settings was approximately 12 years (M = 12.43, SD = 9.87 years). Participants who reported working with youth both in school settings and in community agencies reported working an average of 16 years (M = 16.10, SD = 10.59). Combined, all participants reported providing mental health services for an average of 10 years (M = 10.82, SD = 8.78).

Of the 229 participants, 222 reported a job title. These included the following titles: school counselor (n = 127, 57.2%); community-based counselor (n = 22, 9.9%); school psychologist (n = 21, 9.5%); administrator (n = 17, 7.7%); social worker (n = 16, 7.2%); other (n = 10, 4.5%); student (n = 6, 2.7%); teacher (n = 2, .9%); and psychologist (n = 1, .5%). Those listed as community-based counselors reported working with adjudicated youth, substance abuse programs, and community agencies serving youth in combined school and community settings. Those who indicated "other" reported working with youth support services in school and community agencies for adjudicated youth, foster care, substance abuse centers, and alternative education settings.

Table 2 summarizes the number and percentage of participants who worked with specific grade-levels of students. Numbers in this chart surpass 229 because some participants worked with several age groups. As indicated in Table 2, the majority of participants reported working with junior high and high schools students.

Table 2: *Number and Percent of Participants Working with Specific Grade Levels of Students*

Grade level	Participants	
	n^a	Percent of total group[a]
Preschool	13	5.7
K-6th grades	60	26.4
7th-8th grades	119	52.4
9th-12th grades	168	74.0
NA (did not work with youth)	15	6.6

Note. N = 229.
[a]Summed column of numbers exceeds 229 and percentages exceed 100% because several participants worked with multiple age groups.

Additionally, participants were asked to identify the school district in which they worked. Of the 229 participants, 148 (64.6%) reported working in urban and suburban settings; 44 (19.2%) reported working in rural settings; and 37 (16.2%) did not clearly specify where they worked, indicating counties rather than school districts or cities.

Almost one-third (n = 86, 37.6%) of participants reported previously assisting in developing youth suicide prevention strategies or policies. On an individual basis, the majority of participants indicated previously working with suicidal youth (n = 196, 85.6%). The remaining participants either reported not working with SY (n = 23, 10.0%) or did not indicate a response (n = 10, 4.4%).

Coding MHPs' Responses to Open-Ended Question

After indicating their level of agreement or disagreement with using NSCs when intervening with suicidal students, participants were asked to explain (in writing) their reasoning. This open-ended question required participants to write a response. These handwritten responses were analyzed using content analysis (Gall, Borg, & Gall, 2007). The two primary authors took responsibility for coding participants' comments. After initially reading and examining the written comments, initial themes were further defined into six overarching categories. Each participant's comment was coded in at least one category. Comments were coded under multiple categories when multiple topics were addressed; therefore the number of comments exceeds the total number of respondents.

After comments were coded independently, inter-rater reliability was established using Cohen's *Kappa* statistic. A target level of inter-rater reliability was set at a .80 level of reliability, identified by Gall et al. (2007) as a minimum level of inter-rater reliability sufficient for most research purposes (p. 254). The inter-rater reliability was calculated using the cross tabs method from the Statistical Package for the Social Sciences (SPSS). When discrepancies in coding were noted between the two raters, consensus was reached following discussion. Prior to discussing discrepancies, inter-rater reliability for each category exceeded .84.

RESULTS

Use of NSCs

Of the total sample (N = 229), 196 participants indicated previously working with SY. This means that the majority of MHPs (85.6%) intervened with suicidal youth. Of participants who intervened with suicidal youth, 99 (50.5%) made a NSC; 92 (46.9%) indicated not contracting with SY; and 5 (2.6%) did not respond. These data provide the basis for answering the first research question, *Do Utah's MHPs report using no-suicide contracts with youth who are suicidal?* In response, half of participating MHPs who intervened with SY utilized NSCs.

Awareness of Policy Regarding NSCs

Participants responded to two survey questions that aligned with the second research question: *Are Utah's Mental Health Professionals aware of existing policies regarding no-suicide contracts?* Regarding policies guiding the use of NSCs, participants were asked if their school/district/agency suggested or required using a NSC. If yes, participants were asked to further identify the type of policy; whether it was formally written, generally assumed/unwritten, or if they were not sure.

Of the 229 participants, 25 (10.9%) reported that their school/district/agency suggested or required using NSCs; 58 (25.3%) reported that their school/district/agency did *not* suggest or require using a NSC; a majority, 131 (57.2%) reported they were *not sure;* and 15 (6.6%) did not respond. Of the 25 participants who indicated their school/district/agency suggested or required NSCs, eight reported having a formal written policy, 14 reported having a generally assumed/unwritten policy, and three were unsure as to the nature of the policy. Based on these data, in response to the second research question, over 80% of participating MHPs reported either being unaware of or not having a policy that specified

guidelines for implementing NSCs with SY. Only 3.5% (n = 8) of all participating MHPs indicated their school/district/agency had a written policy regarding use of NSCs.

Opinions Regarding NSCs

Of 229 participants, 201 (87.8%) responded to the following question: *Do you agree/disagree with using no-suicide agreements/contracts when working with students who are suicidal?* Response options included numbers 1 through 5, anchored on the extreme ends with 1 indicating *strongly disagree* and 5 indicating *strongly agree*. Of the 201 participants who responded, 26 (12.9%) indicated disagreement with using NSCs, responding with a 1 or 2. In contrast, 103 (51.2% of 201 participants) indicated agreement with using NSCs, responding with 4 or 5: Half of respondents agreed with using NSCs when working with SY. Of the 201 respondents, 72 (35.8%) responded with a 3 on the Likert scale, reflecting uncertainty regarding agreement or disagreement with using NSCs.

These data provide the basis for answering the third research question, *When working with SY, to what extent do Utah's MHPs agree or disagree with using NSCs?* Participants' responses indicate that when intervening with SY, participating MHPs were more likely to agree with using NSCs (M = 3.54, SD = 1.09).

Reasons Underlying Use of NSCs

Participants explained (in writing) their reasoning for agreeing/disagreeing with the use of NSCs. Of 229 participants, 177 (77.3%) offered explanations. The six overarching coding categories to describe participants' responses included: (a) trusting NSCs to keep students safe and students benefiting from structured guidelines of contracting; (b) following guidelines and previous practice that encouraged or discouraged the use of contracting; (c) building rapport and opening discussion regarding the student's suicidal thoughts and plans; (d) expressing the need for additional training and additional intervention options to more effectively respond to suicidal youth; (e) emphasizing individual student needs and evaluating benefits and drawbacks of contracting with each student; and (f) renaming the NSC to reflect positive action, rather than focusing on *not* completing suicide.

Trust in NSCs and benefits of structure (n = 75, 43.4% of 177 who offered explanations). Participants often explained their agreement or disagreement by referring to personal perceptions of various aspects of contracting. In this category, participants shared positive perceptions of placing trust in contracts, increasing or placing responsibility on students for accountability and commitment to keeping agreements specified in NSCs. Participants expressed the benefits of contracts offering structure and a sense of direction to SY who lacked and desperately needed a sense of direction. More specifically, 61 participants referred to the benefits contracting offered SY, including increased trust, commitment, and accountability. Beyond the structure provided for students, 21 participants explained that NSCs also offered structure and step-by-step directions for adults interacting with SY. When faced with the challenging situation of intervening with SY, several participants indicated that contracting clearly outlined what needed to be done.

Guidelines, policy, and practice (n = 44, 24.9% of 177 who offered explanations). When explaining their agreement or disagreement with contracting, several participants referred to specific policy/guidelines (including legal implications), past research, best practice, and relying on previous personal experience or inexperience with NSCs (n = 44). However, of these 44 participants, only three referred to a specific policy guiding their decision (school district policy and mental health professional guidelines); seven participants explained their reasoning for using or not using NSCs was based on legal implications; 17 participants referred to past research and guidelines supporting *best practice*. Additionally, as part of their explanation for supporting or *not* supporting NSCs, 20 participants included personal experience or inexperience with NSCs. Most evident in supporting NSCs was participants' perceptions of prior success with NSCs. Likewise, most evident in not supporting NSCs was participants' perceptions of prior difficulties and perceived lack of success when implementing NSCs.

Rapport and open communication (n = 32, 18.1% of 177 who offered explanations). Another common theme related to the openness and quality of communication with SY. Participants commented that NSCs helped facilitate open discussion about suicide, leading to students' perceptions of increased support and hope. Twenty-one participants explained either using or not using NSCs based on the potential to increase support for the SY. Six participants referred to the contract's potential to increase students' hope by identifying specific goals, and focusing on the future. Six participants referred to the contract's potential for opening an honest discussion of suicide.

Additional training and increased options for intervention (n = 35, 19.8% of 177 who offered explanations). Participants explained their ambivalence or disagreement with using NSCs by indicating a need for more information and training (n = 15). In addition to the NSC, participants expressed a need to expand intervention strategies to include more options (n = 20). Expressing a perceived lack of knowledge and training, participants' responses emphasized the need for increased training and a broader repertoire of treatment options to intervene more effectively with SY.

Student-centered approach (n = 21, 11.9% of 177 who offered explanations). Participants explained their agreement or disagreement with using NSCs by emphasizing the importance of a student-centered approach (n = 21). When deciding whether to implement a NSC, these participants explained the importance of taking into account the individual's uniqueness. More specifically, 15 of the 21 comments referred to the importance of carefully attending to unique student's needs, including cultural sensitivity. Participants cautioned not to rigidly use generic and impersonal contracts. When weighing in on a decision of whether to use the NSC, eight participants referenced the importance of attending to student impressions of contracting. These participants indicated that some students might respond positively and others might not. To determine if the NSC was something MHPs should pursue with a particular student, participants suggested attending to nonverbal cues and closely monitoring student's "buy in" during the process.

Rename no-suicide contract (n = 3, 1.7% of 177 who offered explanations). Three participants suggested renaming NSCs. One participant expressed that SY needed positive strategies and a "plan to live," rather than the NSC's negative slant, telling SY what they should *not* do (complete suicide). Two participants suggested renaming the NSC, suggesting the title, "safety plan."

DISCUSSION

When working with youth, suicide prevention is a high priority for educators, school-based MHPs, and those working with youth in community agencies and services for adjudicated youth (Cash, 2008; Miller, Eckert, & Mazza, 2009; Walsh & Eggert, 2008). Although professionals routinely use NSCs and many supervisors and professional groups encourage this intervention as standard practice (National Association of School Psychologists, 2002; Sandoval & Zadeh, 2008), few studies have investigated the effectiveness of NSCs (Reid, 1998; Rudd, Mandrusiak, & Joiner, 2006). In particular, the research basis for implementing NSCs with adolescents is particularly limited (Garvey et al., 2009).

The most striking finding, over 80% of participating MHPs reported either being unaware of or not having a school district or agency policy which specified guidelines for implementing NSCs with SY. Less than 4% of all participating MHPs indicated their district or agency had a written policy regarding the use of NSCs. Although the vast majority of participants were unsure of policy, they tended to agree with using NSCs.

Half of those who reported intervening with SY implemented contracts. This prevalence rate is comparable to previous research conducted with 267 Minnesota psychiatrists, of which half reported intervening with NSCs (Kroll, 2000).

Limitations

This study was conducted with a convenience sample of Utah's MHPs who attended an annual youth suicide prevention conference. With this in mind, caution should be taken when generalizing this study's findings to other populations. In order to determine MHPs' perceptions of and use of NSCs, specific groups should conduct their own research. Although some findings may be similar across states, each state would benefit from the specific information relevant to their unique needs and practice.

Participants may have misunderstood survey questions, or may have interpreted meanings other than were intended. Additionally, the questionnaire's reliability was not established to assure that participants' responses were consistent across time or within the questionnaire across similar questions.

This study's questionnaire was designed to be completed in less than 20 minutes. Although the questionnaire's brevity most likely increased participation rate, demographic information describing participants was limited. Therefore, data were not examined across groups based on participants' demographics. Additionally the questionnaire did not describe context and risk factors associated with suicidal threat. This may have confused participating MHPs because decisions to implement NSCs may hinge on the perceived degree of suicidal risk (Lieberman & Davis, 2002; Sandoval & Zadeh, 2008, pp. 56-57). An improved survey would include descriptors of suicidal intent and the likelihood of carrying out a plan to complete suicide. This would assist future researchers in determining at what level of risk MHPs may or may not recommend specific types of intervention.

IMPLICATIONS FOR PRACTICE

Practitioners need additional training. Based on written comments, participants expressed a need for additional training regarding the use of NSCs. This aligns with previous research indicating MHPs express both a lack of preparation and a lack of confidence in effectively intervening during crises, including incidents of suicidal threat (Allen, Burt, et al., 2002; Allen, Jerome, et al., 2002; King et al., 1999; McAdams & Keener, 2008). On the topic of suicide awareness training, Gibbons and Studer (2008) offered suggestions for involving school staff. They emphasized the importance of including annual updates and ongoing training, including role-plays and scenarios to offer opportunities to practice and observe applied knowledge and skills. Merely offering written information about research-based practice and trends countering current use of NSCs is insufficient (Lehman, 2010).

Another suggested resource for training school-based MHPs, Miller (2011) published an excellent book with the Guilford Practitioner Series: *Child and Adolescent Suicidal Behavior: School-Based Prevention, Assessment, and Intervention*. He recommended using *commitment to treatment plans* rather than NSCs. When updating school crisis plans, Miller's information should be carefully considered, integrating this information regarding immediate intervention with SY and commitment to treatment. Additionally, professionals with extensive crisis intervention training offer excellent guidelines to intervene and protect SY (see PREPaRE textbook by Brock, Nickerson, Reeves, Jimerson, Lieberman, & Feinberg, 2009, pp. 74-77).

Research must guide policy. Interestingly, several participants reported implementing NSCs because they perceived longstanding research supported this intervention as *best practice*. Opposing this reasoning, other participants claimed existing research did *not* support NSCs. These participants reported opting *not* to use NSCs because they believed contracting was harmful and lacked an evidence base to support its use. When initially coding participants' comments, researchers anticipated input regarding the need for more research to investigate effectiveness of NSCs. However, this "need for research" was not mentioned. It appears that MHPs may be entrenched in the status quo of *always doing what they've always done*.

Reflecting the gap between research and practice (Gaudiano, Brown, & Miller, 2011), practitioners may not be in step with nor in search of new research regarding NSCs (Lehman, 2010; Miller, 2011; Mishara, 2008). Acknowledging this challenge in the trenches, school and agency policy regarding youth

suicide prevention *must* stay abreast of best practice and research. School and agency leadership must require and provide continuing professional development on this critical topic, keeping all MHPs aware of and familiar with policy guiding practice. Ethical issues related to quality of care and the necessity of continuing professional development to address training needs are also highly relevant in this discussion (Jobes, Rudd, Overholser, & Joiner, 2008; Moyer & Sullivan, 2008).

Clearly specified policy must guide practice. One of UT's school psychologists, Leu (2008), emphasized the importance of school districts providing specific guidelines on how to intervene with suicidal students: "The time to figure these details out is not in the middle of the event; 'winging it' is a dangerous policy. Training should include regular review of these policies and procedures and how they are to be implemented" (Leu, 2008, p. 47).

Understanding and aligning with school, district, and agency policies and protocols is important for fluency and consistency of prevention and intervention efforts. An unclear or undefined policy regarding NSCs and responding to SY detracts from the effectiveness of suicide prevention, leaving professionals in a state of ambiguity regarding how to operate without a specifically defined *best practice*. When intervening with SY, this critical juncture of assisting youth in choosing life over death *must* be based on clearly defined protocol, not leaving professionals with the task of relying on personal assumptions regarding what they believe might be effective support (Miller, 2011; Mishara, 2008; Pompili, 2010).

MHPs need to know what is expected of them and how they should respond. Specific steps for intervening with SY must be clearly documented in crisis plans and policy. Furthermore, dissemination of protocol is critical: Written policy must be readily available to all MHPs. Additionally (referring back to the importance of training), MHPs need regular training to increase familiarity with evidence-based practice and to keep abreast of policy, developing requisite skills for intervening with SY.

Policy must be updated annually and revision dates clearly identified on both electronic and hard copies. Old policies must be shredded and replaced with new updated copies. Follow-through is more likely when one person takes responsibility for ensuring suicide prevention/intervention policies are updated and distributed.

IMPLICATIONS FOR FUTURE RESEARCH

Expanding this research beyond Utah to include MHPs working across the U.S. would provide critical information to national organizations associated with youth mental health services (e.g., the American Psychological Association (APA), the American Counseling Association (ACA), the National Association of School Psychologists [NASP], the American School Counselor Association [ASCA], and the School Social Work Association of America [SSWAA]). These organizations could then provide MHPs with up-to-date, clearly defined protocol related to youth suicide prevention.

Regarding NSCs and other interventions to deter youth from completing suicide, future research may investigate perceptions of MHPs, SY, and parents of SY. In particular, researching perspectives of SY who previously engaged in NSCs would enlighten practitioners' understanding of better meeting the needs of this vulnerable population. SY who previously participated in NSCs could describe their personal experience, including their impressions of NSCs, the pros and cons of implementing this type of intervention, and the effectiveness of NSCs in deterring suicidal thoughts and behaviors.

CONCLUSIONS

In particular, connotations associated with formal no-suicide contracting are considered negative and ambiguous. Rudd et al. (2006) suggested NSCs be replaced with "commitment to treatment statements." An example of this change, recently revised military protocol moved away from implementing NSCs and recommended focusing on commitment to treatment statements. This assisted individuals in focusing on life and positive choices that encourage healthy living (Britton, Patrick, Wenzel, & Williams, 2011). Rather than depending on written NSCs, Miller (2011) also encouraged the use of commitment to

treatment statements (p. 105). The current professional trend is to focus on supportive plans rather than contracting *not* to kill oneself. However, because schools shy away from clinical terms (e.g., treatment) and must consider age appropriate language, those who work with SY may consider the term, *safety plan*.

Youth suicide prevention is a serious undertaking for mental health professionals, one that requires solid preparation and sufficient skills to effectively intervene when supporting SY. Training aligned with best practice must start in university training programs and national professional organizations, then extend into the trenches with continuing professional development that encourages ethical and evidence-based practice. Additionally, national organizations must clarify expectations for MHPs' response. National organizations' websites and materials must be updated to reflect policy change and evidence-based practice regarding NSCs: These websites must offer current guidelines and structure for professionals who depend on this guidance.

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BOOK REVIEW

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BOOK REVIEW

Mental Health in Schools: Engaging Learners, Preventing Problems, and Improving Schools

By Howard Adelman PhD, & Linda Taylor PhD

22010, Corwin, USA, 310 pp.

$41.95, ISBN: 9781412975384

Reviewed by Courtney Matz, M.A.

Growing numbers of children are suffering needlessly because their emotional, behavioral, and developmental needs are not being met by the very institutions and systems that were created to take care of them.

-U.S. Department of Health and Human Services (2001) found in Adelman and Taylor (2010)

In public schools across the United States school administrators, teachers, psychologists, counselors and other support staff face the challenge of ensuring their students receive needed mental health services despite budget cuts and other significant logistical constraints. For example, with the elimination of AB3632 funding in 2010, Local Educational Agencies across California are feeling immense pressure to deliver mental health services to students who previously received assistance from the Department of Mental Health. A timely addition to the educational literature, authors Adelman and Taylor comprehensively address this juxtaposition of need and constraint in their most recent book, *Mental Health in Schools: Engaging Learners, Preventing Problems, and Improving Schools*. Within the text, readers are provided with valuable information regarding the restructure, development, and enhancement of school-based mental health programs. The authors open with a review of the history and current state of mental health in schools and move toward making suggestions for how to better address the mental health needs of students. They advocate persuasively for effective collaboration among stakeholders when providing mental health services in the public school systems. School psychologists, in particular, may find the guidelines provided by the authors useful in paving the way for school-based mental health service delivery models because they will undoubtedly be responsible for creating comprehensive programs to address student needs.

PAST

School based mental health service providers have historically been tasked with large number of referrals for the provision of mental health services and it is estimated that the ratio of school psychologists to students will continue to rise from 1 to 2,500 to even larger numbers (Ringeisen, Henderson, & Hoagwood, 2003).

Adelman and Taylor begin their analysis of mental health services with an historical review. The authors evaluate the proliferation of legislation and public policy, which has sparked various movements in the delivery of school-based mental health services. They argue that these undertakings, including the President's New Freedom Commission on Mental Health (2003) and the 2007 Progress Report on the President's New Freedom Initiative, have created conflicting agendas. These initiatives call for schools to be involved in the provision of mental health services while at the same time demanding that they

maximize their focus on instruction in the school setting. As a result, practitioners are often perplexed about how to balance these demands and implement these services in the schools and their surrounding communities. School systems have traditionally operated under a deficit model of mental health service delivery, which consists of the marginalization and compartmentalization of services seen as auxiliary or unnecessary for the betterment of the whole. For example, student support programs and services are often added to the educational curriculum on an ad hoc basis, via student support personnel who are rarely part of the school's overarching organizational structure.

Adelman and Taylor assert that this compartmentalization of service, does not effectively address the challenges our students have encountered and will continue to face. Thus, the only way to meet the needs of the students is to develop a comprehensive approach of service delivery. To do so, we must move the focus of education from accountability and standardized achievement tests to the well being of the students. We must remember that our job is to provide all youth an equal opportunity to learn.

PRESENT

According to Adelman & Taylor, the mental health concerns that currently impact students are not new. Students now, as in the past, continue to experience depression and anxiety, face issues such as bullying and interpersonal conflict, and engage in behaviors such as drug and alcohol use, eating disorders, and self-harm. Schools have the opportunity to play an active role in both preventing these problems and in promoting positive mental health. Because many children's only source of mental health care is the school system, schools function as a vital resource for psychological services (Burns et al., 1995, Crespi & Fischett, 1997).

Rather than focusing on the diagnosis of pathology, which is the most commonly utilized approach, Adelman and Taylor call policy makers and practitioners to re-evaluate these challenges from the perspective of the student. They urge school practitioners to develop a full continuum of comprehensive preventative programs and interventions, including the promotion of mental health and intervention with problems at an early age, rather than focus only on the presence or absence of a disorder. Adelman and Taylor suggest that for us to do so, we need to create readiness for change, re-engage students in the learning process, obtain the resources to create change, and create supportive school environments.

FUTURE

School-based strategies

As we move forward, we must change how we approach the difficulties that students are experiencing. We must guarantee that all students have an equal opportunity to learn by providing an integrated school-community system that promotes mental health, prevents mental health and psychosocial problems, and provides special assistance for those who are experiencing severe and pervasive mental health challenges.

Adelman and Taylor urge us to abandon the "wait to fail" model that is often in practiced in schools. They advise us to find a better way to work together via a comprehensive framework for learning supports using the following methods: classroom focused enabling, support for transitions, home involvement with schools, crisis response and prevention, community involvement and support, and student and family assistance. This new model of student support services involves an integrated infrastructure designed to create protective barriers, which will be embedded in the school system and promote the optimum development of students.

Adelman and Taylor propose a model that facilitates social and emotional development and learning processes to help children develop the fundamental skills for life effectiveness. To make this happen, schools must develop ways to respond to behavior problems that identify the antecedents of the problem and develop specific strategies for addressing these areas through teachers, clinicians, parents, and students themselves. Schools should try and move away from models of social control and

punishment by preventing and anticipating misbehavior, reacting during misbehavior, and following up with students and appropriate stakeholders. One way to do so would be by implementing school-wide positive behavioral supports to address misbehavior and motivational concerns. To create a positive school culture, personalizing instruction and providing special assistance, if necessary, are important.

Moreover, students need to perceive the instructional process, content, and outcomes as fitting with their interests and capabilities. If they do not, efforts to create this personalization may be necessary for engagement in the school climate. The simplest way to create a supportive comprehensive school environment is to involve students in major decisions.

We must also remember that it is essential to focus on the well-being of the school staff. With the increased class sizes, work-related duties, and reduced funding, school staff can easily feel overwhelmed and over-worked. In this stressful school environment, we must remember to focus on our own mental health, by supporting one another, and creating a more positive school climate.

Policy and systemic change

To meet the needs of students and create schools in which comprehensive supports are easily accessible, essential resources must be made available including finances, personnel time, space, and equipment. The piecemeal and fragmented natures of the current systems need to be coordinated and used more effectively to address student needs. Thus, individuals involved should make attempts to collaborate more effectively. Schools are more efficient and create a more caring environment for all when a symbiotic relationship between the family, community, and schools is established. When those involved create a formalized agreement to accomplish mutually desired results, all stakeholders' needs are met.

If this process of change is to be truly successful, we cannot keep trying the quick fix methods that most schools utilize. Presently, we tend to focus on the major issues confronting us now without looking at the possibility that there is a better option: prevention.

The systems changes that are involved in this movement are complex and must occur at both the school and district level. Adelman and Taylor posit that the steps necessary to facilitate systemic change include: 1) articulation of a clear shared vision for the changes; 2) mobilizing interest, consensus, and support among key stakeholders; 3) clarification of feasibility; 4) major policy commitment from all participating stakeholders; and 5) negotiating agreements with decision-makers and implementers. After all of this has happened, the infrastructure must be developed and enhanced based on a clear articulation of basic functions. The authors note that the change requires training, resources, and support for scale-up, sustainability, and ongoing capacity building.

Final thoughts

Adelman and Taylor have provided school psychologists and other educators with an in-depth analysis of the history of the mental health service delivery in the public school system. They have also thoroughly addressed the need for the modification of the present structure while providing suggestions as to how to facilitate this change. Adelman and Taylor's text aids us in our endeavor to create the necessary changes in ensuring that the mental health needs of our students are being met. They leave the actual process of change up to us.

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