

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

Use of Response to Intervention in Social, Emotional and Behavioral Domains:

A Meta-Synthesis

Hannah Ragland

Submitted in partial fulfillment of the requirements of the Master of Arts Special Education
degree at the University of Alaska Southeast

1. Introduction

1.1 Background

The use of Response to Intervention (RTI) was formalized with the passage of revisions to the Individuals with Disabilities Education Act (IDEA) in 2004. This reform bill provided Special Education programs direction on an emerging approach to assess and recommend students for special education services, RTI. The intent of RTI was to address concerns with the previous model of Special Education qualification for learning disabilities based on discrepancies in IQ achievement. The discrepancy model gave clear criteria for identifying students with special needs, but quickly became known as the "wait to fail" model. Rather than delaying identification of students with special needs until the point they were failing, RTI provided a method for early identification of struggling students, and research-based academic interventions to address problems prior to Special Education referral.

With RTI, the standard for additional services was broadened to include students who were not responding to research-based strategies, rather than limited to those who were proven to perform below standard performance levels. Use of RTI programs by schools is not required, but provided as an option in order to address lower-level problems at a school-wide level, regardless of whether or not special education services were required.

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

Many in the field of special education services saw this as an achievement, with student performance monitored and responded to prior to the student falling behind the normal levels of achievement in a specific area (academic or behavioral). Although motivated by special education referrals in the area of specific learning disabilities, this change provided an opportunity for school districts to address behavioral difficulties with a systematic approach. Specifically, the RTI model involves looking at all students with the same criteria, in accordance with their response to intervention, in order to identify students that may qualify for lower “tiers” of support, and address individual student needs according to a tiered support system, regardless of whether they qualify for special education services.

The initial tier (Tier I) provided universal supports that were applied to all students, regardless of their needs. In behavioral approaches to RTI, this generally involves the use of a school- or district-wide positive behavior support system. Students who did not respond to Tier I supports were referred to Tier II, which involved a higher level of intervention, in the general education classroom. Students who did not respond at Tier II would be referred to Tier III, and receive an even higher level of support. Depending on a student’s response to Tier III interventions, special education referrals could be made. In theory, some students receiving early intervention (through Tier I and II supports) would respond to the interventions, and not require additional, more intensive interventions. By addressing the needs of students in lower tiers of support, the number of students who are referred to special education services would then be reduced.

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

Some school districts adopted the RTI model, and implemented the use of research-based assessments to identify students needing additional behavioral supports. Other school districts have continued to use the discrepancy model for special education referral, and do not have a program in place to inform decisions when working with students who require behavioral interventions.

1.2 Author's Experiences and Beliefs

My interest in RTI and behavioral interventions stems from my experience working in a K-12 school environment, where RTI is not used. I have worked primarily with students who experience difficulties with behavior due to various disabilities, and receive support that is often guided by a Behavior Intervention Plan (BIP), which is developed based on their needs found in an Individualized Education Plan (IEP) or a Section 504 plan. In working with special education students in a general education setting, I recognized that there are often other individuals in the general education setting who had behaviors that could sometimes be more problematic than students with a formal BIP or identified for special education services.

Students who did not have an IEP or BIP struggled in the general education classroom, and were responded to in different ways. Despite the fact that school-wide behavior policies exist at many sites, behavior is often treated inconsistently and without consideration of strategies that are proven to be successful. There is often little school- or district-wide consideration of how to address these behavioral difficulties systematically. Students who are not formally recognized with an IEP or BIP appear to fall between the cracks without a process to identify students with challenging behavior in place.

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

For general education teachers, this presents numerous problems. There appears to be a lack of awareness regarding how to deal consistently with problematic student behavior. Students are referred to special education services after behaviors have become severe. Waiting for a medical diagnosis, or for a student to fall so far behind the “norm” in order to prescribe a specific intervention, allows challenging behaviors to become a habit, and over time could become much more difficult to address.

In researching this topic, I hope to gain insight into ways to support students who are falling between the cracks in the area of social, emotional, and behavioral development because they do not qualify for special education services. I hope to incorporate this knowledge in my implementation of tertiary supports for behavioral interventions in the general education setting, as well as improve the quality of intervention for students, whether or not they qualify for special education services. I hope to synthesize information that leads to a better understanding of the successful implementation of RTI programs to address behavioral challenges, and the interventions that best meet the needs of such programs.

My interest in the above topics leads me to my interest in the following research topics:

1. What factors influence the successful implementation of RTI in school settings for social-emotional or behavior support?
2. What intervention techniques influence the success of students who may require additional interventions, or special education services related to social-emotional or behavioral needs?

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

3. How do referral practices differ between RTI and other forms of special education referral?

1.3 Purpose of this metasynthesis

This metasynthesis, focusing on the use of RTI to address social, emotional and behavioral concerns (SEB), had multiple purposes. One purpose was to look at factors that influenced the successful implementation of RTI models to address SEB student needs. A second purpose was to examine whether specific interventions influenced the success of students with SEB needs. A third purpose was to determine whether the use of RTI in the SEB domains influenced special education referrals. A fourth purpose was to classify each article by publication type, to identify the research design, participants, and data sources of each research study, and to summarize the findings of each study. My final purpose in conducting this meta-synthesis was to identify significant themes in these articles, and in order to improve my ability to assist with tertiary behavior referrals once I receive my certificate to teach in special education programs.

2. Methods

2.1 Selection criteria

The fifty journal articles included in this meta-synthesis met the following research criteria:

1. The articles explored issues that were not solely limited to academic achievement.
2. The articles explored issues relevant only to the school setting.
3. The articles explored issues related to procedures or protocols that addressed social-emotional or behavioral referrals, and response to intervention.

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

4. The articles were published in peer-reviewed journals related to the field of education.
5. The articles were published between January 2000 and December of 2014.

2.2 Search Procedures

Database searches and ancestral searches were conducted to locate articles for this meta- synthesis.

2.2.1. Database searches

I conducted Boolean searches within the Educational Resources Information Center (ERIC, Ebscohost) using these specific search terms:

1. (“response to intervention”) AND (“behavior”)

These data base searches yielded a total of fifty articles that met the search criteria (Barnett, et al., 2006; Bayat, Mindes, & Covitt, 2010; Benner, Nelson, Sanders, & Ralston, 2012; Berzin & O’Connor, 2010; Burns, et al., 2013; Chafouleas, Sanetti, Kilgus, & Maggin, 2012; Chamberlain, 2009; Cheney, Flower, & Templeton, 2008; Cihak, Alberto, & Fredrick, 2007; Diamond, Justice, Siegler, & Snyder, 2013; Erickson, Noonan, & Jenson, 2012; Evans & Owens, 2010; Fairbanks, Sugai, Guardino, & Lathrop, 2007; Fox, Carta, Strain, Dunlap, & Hemmeter, 2009; Froiland, 2011; Gresham, 2004; Gresham, 2005; Gresham, 2007; Gresham, Hunter, Corwin, & Fischer, 2013; Gruman & Hoelzen, 2011; Hammond, Campbell, & Ruble, 2013; Haraway, 2012; Harris-Murri, King, & Rostenberg, 2006; Hoover, 2010; Jeffrey, McCurdy, Ewing, & Polis, 2009; Kalberg, Lane, & Menzies, 2010; Kauffman, Bruce, & Lloyd, 2012; Landau & Swerdlik, 2005; Lane, Kalberg, Parks, & Carter, 2008; Maag & Katsiyannis, 2008; Mack, Smith, & Straight, 2010; McIntosh, Brown, & Borgmeier, 2008;

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

McIntosh, Campbell, Carter, & Dickey, 2009; Menzies & Lane, 2011; Mitchell, Deshler, & Lenz, 2012; Muyskens, Marsten, & Reschly, 2007; Myers, Simonsen, & Sugai, 2011; O'Connor & Freeman, 2012; Oakes, et al., 2012; Pavri, 2010; Pearce, 2009; Proctor, Graves, & Esch, 2012; Saeki, et al., 2011; Skinner, McCleary, Skolitis, Poncy, & Cates, 2013; Sugai & Horner, 2009; Thomas & Dykes, 2011; Thompson, Marchant, Anderson, Prater, & Gibb, 2012; Volpe & Gadow, 2010; Weiss, 2013; Witsken, Stoeckel, & D'Amato, 2008).

2.2.2 Ancestral Searches

An ancestral search involves reviewing the reference lists of previously published works to locate literature relevant to one's topic of interest (Welch, Brownell, & Sheridan, 1999). I conducted ancestral searches using the reference lists of the previously retrieved articles. These ancestral searches yielded one additional article that met the selection criteria (Lane, Kalberg, Parks, & Carter, 2008)

2.3. Coding procedures

I used a coding form to categorize the information presented in each of the fifty articles. This coding form was based on: (a) publication type; (b) research design; (c) participants; (d) data sources; and (e) findings of the studies (Table 1).

2.3.1 Publication Type

Each journal article was evaluated and classified according to publication type (e.g., research study, theoretical work, descriptive work, opinion piece/position paper, guide, annotated bibliography, review of the literature). *Research studies* use a formal research design to gather and/or analyze quantitative and/or qualitative data. *Theoretical works* use existing literature to analyze, expand, or further define a specific philosophical and/or

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

theoretical assumption. *Descriptive works* describe phenomena and experiences, but do not disclose particular methods for attaining data. *Opinion pieces/position papers* explain, justify, or recommend a particular course of action based on the author's opinions and/or beliefs. *Guides* give instructions or advice explaining how practitioners might implement a particular agenda. An *annotated bibliography* is a list of cited works on a particular topic, followed by a descriptive paragraph describing, evaluating, or critiquing the source. *Literature reviews* critically analyze the published literature on a topic through summary, classification, and comparison.

2.3.2 Research Design

Each empirical study was further classified by research design (i.e., quantitative, qualitative, mixed methods research). *Quantitative* research utilizes numbers to convey information. Instead of numbers, *qualitative* research uses language to explore issues and phenomenon. *Mixed methods* research involves the use of both quantitative and qualitative methods to present information within a single study.

2.3.3 Participants, data sources, and findings

I identified the participants in each study (e.g., students identified in the general education setting, and students identified in the special education setting). I also identified the data sources used in each study (e.g., observations, surveys). Lastly, I summarized the findings of each study (Table 2).

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

Table 1

Author(s) & Year of Publication	Publication Type
Barnett, et al., 2006	Research study
Bayat, Mindes, & Covitt, 2010	Descriptive work
Benner, Nelson, Sanders, & Ralston, 2012	Research Study
Berzin & O'Connor, 2010	Research study
Burns, et al., 2013	Guide
Chafouleas, Sanetti, Kilgus, & Maggin, 2012	Research study
Chamberlain, 2009	Opinion piece
Cheney, Flower, & Templeton, 2008	Research study
Cihak, Alberto, & Fredrick, 2007	Research study
Diamond, Justice, Siegler, & Snyder, 2013	Literature review
Erickson, Noonan, & Jenson, 2012	Research study
Evans & Owens, 2010	Descriptive work
Fairbanks, Sugai, Guardino, & Lathrop, 2007	Research study
Fox, Carta, Strain, Dunlap, & Hemmeter, 2009	Descriptive work
Froiland, 2011	Guide
Gresham, 2004	Descriptive work
Gresham, 2005	Literature review
Gresham, 2007	Literature review
Gresham, Hunter, Corwin, & Fischer, 2013	Descriptive work
Gruman & Hoelzen, 2011	Guide
Hammond, Campbell, & Ruble, 2013	Literature review
Haraway, 2012	Guide
Harris-Murri, King, & Rostenberg, 2006	Literature review
Hoover, 2010	Descriptive work
Jeffrey, McCurdy, Ewing, & Polis, 2009	Research study
Kalberg, Lane, & Menzies, 2010	Research study
Kauffman, Bruce, & Lloyd, 2012	Report
Landau & Swerdlik, 2005	Descriptive work

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

Lane, Kalberg, Parks, & Carter, 2008	Research study
Maag & Katsiyannis, 2008	Literature Review
Mack, Smith, & Straight, 2010	Guide
McIntosh, Brown, & Borgmeier, 2008	Literature Review
McIntosh, Campbell, Carter, & Dickey, 2009	Research study
Menzies & Lane, 2011	Literature review
Mitchell, Deshler, & Lenz, 2012	Research study
Muyskens, Marsten, & Reschly, 2007	Research study
Myers, Simonsen, & Sugai, 2011	Research study
O'Connor & Freeman, 2012	Descriptive work
Oakes, et al., 2012	Research study
Pavri, 2010	Research study
Pearce, 2009	Research study
Proctor, Graves, & Esch, 2012	Literature review
Saeki, et al., 2011	Research Study
Skinner, McCleary, Skolitis, Poncy, & Cates, 2013	Literature review
Sugai & Horner, 2009	Guide
Thomas & Dykes, 2011	Descriptive work
Thompson, Marchant, Anderson, Prater, & Gibb, 2012	Research study
Volpe & Gadow, 2010	Research study
Weiss, 2013	Descriptive work
Witsken, Stoeckel, & D'Amato, 2008	Literature review

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

Table 2

Authors	Research Design	Participants	Data Sources	Findings
Barnett, et al., 2006	Mixed methods	1 preschool student, 1 teacher	Curriculum-based screening and assessment, teacher and parent interviews, direct student observations	Reviews a case study on tertiary interventions in the preschool setting. At the third tier of intervention, the preschooler involved showed significantly less aggressive and challenging behavior.
Benner, Nelson, Sanders, & Ralston, 2012	Quantitative	70 students in grades K-3, 43 teachers from 13 urban schools	Direct student observations, fidelity checklist, Classroom Atmosphere Rating Scale, Woodcock-Johnson II Tests of Achievement	Examines the implementation of a specific Tier I intervention, showing significant decreases in problem behaviors, with little (though slightly positive) correlation to on-task behavior, and no correlation to academic achievement. Positive effects were not as significant in schools with higher enrollment of students with low socioeconomic status and students with higher initial levels of problem behavior.
Berzin & O'Conner, 2010	Quantitative	58 post-high school educational institutes	Syllabi of all classes related to social work	Analyzes school social work programs (based on syllabi), and responsiveness to current needs in social work. Findings suggest that course work is driven towards clinical coursework, rather than a school setting.
Chafouleas, Sanetti,	Quantitative	20 teacher-stud	Direct Behavior	Evaluates the sensitivity of Direct Behavior Rating

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

Kilgus, & Maggin, 2012		ent (grades K-5) pairs from 6 school districts	Rating Single-Item Scale (DBR-SIS)	(DBR) to assess changes to disruptive behavior, academic engagement and compliance. In response to a standardized intervention, disruptive behavior decreased, while academic engagement and compliance increased.
Cheney, Flower, & Templeton, 2008	Quantitative	127 elementary students from 18 school districts	Systematic Screening for Behavior Disorders (SSBD), daily progress report (student self-evaluation and staff ratings)	Evaluates the metrics established by Gresham (2005) to determine responsiveness to behavioral interventions, and evaluate impacts to special education referrals. Found that the metrics established by Gresham appeared to be successful in reducing referrals and preventing the development of emotional and behavioral disabilities, but pointed to the need for additional research to confirm these findings.
Cihak, Alberto, & Fredrick, 2007	Mixed methods	4 high school students	Student observations, teacher interviews	Examines the use of functional behavior analysis to determine appropriate interventions for high school students. Found that antecedent-based consequences were as effective (and in some cases more effective) than consequence-based interventions.
Erickson, Noonan, & Jenson, 2012	Quantitative	294 teachers, 15 administrators, 25 other certified staff and 11	Online staff survey, standardized state assessment scores	Surveys teachers to determine the level of integrity of a District-wide integrated academic/behavioral RtI program. Shows a high level of reliability of a

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

		noncertified staff		specific program throughout the district, and some correlation with academic achievement.
Fairbanks, Sugai, Guardino, & Lathrop, 2007	Quantitative	10 students and 2 teachers in two classes, grade 2	DIBELS achievement data, direct student observation, student-teacher check-in/check out form	Evaluates the success of check-in/check-out cards as a Tier II intervention to address challenging behavior. Half of the study's participants responded to Tier II interventions, while the other half moved to Tier III interventions, which involved functional behavior analysis and higher levels of support.
Jeffrey, McCurdy, Ewing, & Polis, 2009	Mixed methods	9 special education teachers with elementary and middle school classes of 6-12 students	Direct teacher and student observations, teacher and student interviews	Measures the success of special education teachers in using specific classroom management strategies to determine teacher response to written feedback and teacher and student reaction to the intervention. Teachers improved the implementation of specific strategies after receiving written feedback, but did not after subsequent feedback.
Kalberg, Lane, & Menzies, 2010	Quantitative	129 students (grades K-5) from one rural school	Student Risk Screening Scale, Systematic Screening for Behavior Disorders, curriculum based measurements	Evaluates the success of behavioral and academic screening used in a comprehensive RTI program in order to identify elementary students for Tier II supports. Provides examples on how to triangulate academic and behavior data in order to refer students to higher tiers of intervention.

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

Lane, Kalberg, Parks, & Carter, 2008	Quantitative	674 high school students	Student Risk Screening Scale (SRSS), Strengths and Difficulties Questionnaire (SDQ), office discipline referrals and grade point average	Assesses the reliability and validity of the SRSS and SDQ when compared to office discipline referrals and grade point average. When used to predict at-risk behavior, the tools were successful at categorizing students at low-risk and students at moderate- or high-risk, but could not differentiate between students at moderate- and high-risk levels.
McIntosh, Campbell, Carter, & Dickey, 2009	Quantitative	36 elementary students	Behavior rating scales, functional behavior analysis, office discipline referrals	Considers the response of students to intervention in Tier II of an RTI program based on the function of student behavior. Students with attention-maintained behavior responded positively to the check-in, check-out intervention, while students with escape-maintained behaviors showed no significant improvement.
Mitchell, Deshler, & Lenz, 2012	Mixed methods	7 teachers from 7 elementary schools in Kansas	Direct teacher observations, teacher interviews	Measures the amount of time special education teachers spent in various roles (collaborator, interventionist, diagnostician, and manager). Time spent on tasks specific to each of the four roles was also recorded, as well as time spent on tasks related to implementing tiers II and III within and RTI framework.
Muyskens, Marsten, &	Quantitative	22,056 students in grades K-8	Behavior screening checklist,	Compares scores from a District-wide behavior screening checklist to

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

Reschly, 2007			standardized achievement test, student records (suspensions and attendance)	disciplinary actions and academic achievement in order to determine the validity of the screening instrument for tertiary referrals. Identifies significant correlations between students who scored above a certain level on the screening checklist when compared to suspensions, achievement scores and attendance data.
Myers, Simonsen, & Sugai, 2011	Quantitative	4 teachers from an urban middle school	Direct teacher and classroom observations	Evaluates the effects of a systematic RTI approach to changing teacher behavior. Teachers were referred to secondary and tertiary tiers for more intensive training based on their use of specific, contingent praise. Student on-task behavior was monitored to compliment the data. Findings suggest improved teacher performance and increased on-task behavior, but failed to establish a causal relationship.
Oakes, et al., 2012	Mixed methods	9 students from a rural elementary school	Teacher surveys, social validity ratings, student academic outcomes, student surveys	Evaluation of nine elementary student responses to Tier 2 interventions. Students scored high during pre-intervention screening, and discussion focused on student self-perception and validity of student surveys. Information on work completion was inconclusive.
Pavri, 2010	Qualitative	9 special education teachers (7	Graduate School nominations,	Surveys urban special education teacher perceptions of RTI in the

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

		female, 2 male) from urban school districts	teacher interviews	social-emotional-behavior domain, and how (or whether) it was used in their classrooms. Educators identified several areas of need for successful implementation.
Pearce, 2009	Mixed Methods	9 students in grades K-5, and 9 teachers from 2 rural schools	Office discipline referrals, teacher and student interviews, direct student observations	Evaluates the success of a tertiary intervention program to address emotional and behavioral challenges. Of nine students referred to Tier II, two students did not respond to interventions, and were referred to Tier III.
Saeki, et al., 2011	Quantitative	44 students in grades 2-4, 3 teachers	Teacher referral, student self-reporting, <i>Social Skills Rating System</i> (SSRS)	Evaluates the success of a three-tiered social and emotional RTI model in an elementary school setting. Provides information to assist school psychologists in providing objective, systemic procedures for incorporating qualitative and quantitative data in the decision-making process.
Thompson, Marchant, Anderson, Prater, & Gibb, 2012	Mixed methods	3 teachers, 83 students in grades 2 & 4 from 3 suburban elementary schools	Direct teacher and student observations, teacher interviews	Evaluates the effects of a systematic RtI approach to changing teacher behavior. Measured teachers' use of behavior-specific praise with students, referring teachers to secondary and tertiary tiers for more intensive training based on teachers' use of behavior-specific praise. Student on-task behavior was monitored to compliment the data, and results showed an increase in on-task behavior.

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

Volpe & Gadow	Quantitative	65 students, ages 6-12	Behavior rating scales (abbreviated and full), medication (methylphenidate)	Compares abbreviated behavior rating scales to full rating scales to examine and compare differences in identifying students for tertiary referrals. Found that abbreviated scales had few significant differences to full rating scales, supporting use of abbreviated rating scales in practice.
---------------	--------------	------------------------	---	--

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

Discussion:**What factors influence the successful implementation of RTI in school settings for social-emotional or behavior support?**

Numerous literature reviews exist which summarize features of successful school- or district-wide RTI implementation to address social, emotional and behavior (SEB) domains (Burns, et al., 2013; Pearce, 2009; Saeki, et al., 2011). Similar success has been described or proven in RTI programs where behavior and academics are integrated (Erickson, Noonan, & Jenson, 2012; Sugai & Horner, 2009). In all cases, schools must consider that class- and school-wide Positive Behavior Support programs should be in place to ensure the success of an RTI program that addressed SEB domains (Pavri, 2010). In reviewing the research, several themes emerged regarding factors that lead to the successful implementation of RTI at a school- or district-wide level to provide support in the SEB domains.

Research-based practices

Many have pointed out the historic emphasis on the use of RTI in academic domains, as cause for the late emergence of implementing RTI to address social, emotional and behavioral skills (Fairbanks, Sugai, Guardino, & Lathrop, 2007; Froiland, 2011; Muyskens, Marsten, & Reschly, 2007; Saeki, et al., 2011). Because RTI was initially envisioned as an alternative for identifying specific learning disabilities, research focused on the use of curriculum-based measurements and standardized formats for evaluating academic achievement and performance. On the other hand, comparatively far less research exists for policies and practices to address SEB needs. Research indicates the need for

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

research-based assessment tools and interventions to address SEB needs within the RTI framework (Diamond, Justice, Siegler, & Snyder, 2013).

Plans and protocols for monitoring must be in place and understood

Research has also been conducted that demonstrates the effectiveness of very specific tools to evaluate and monitor social and emotional behaviors. This includes behavior rating scales (Chafouleas, Sanetti, Kilgus, & Maggin, 2012; Volpe & Gadow, 2010), behavior screening checklists (Muyskens, et al., 2007), office discipline referrals (Fairbanks, et al., 2007; Lane, Kalberg, Parks, & Carter, 2008; Pearce, 2009), and formalized, commercially available, behavior rating or screening assessments (Gresham, Hunter, Corwin, & Fischer, 2013; Kalberg, Lane, & Menzies, 2010; Lane, et al., 2008). In any case, plans for assessment and data management and evaluation should be clear to all parties involved in order for successful implementation (O'Connor & Freeman, 2012; Pavri, 2010).

Teacher training and attitudes

Improving teacher attitudes towards RTI supports the successful implementation of RTI programs in the SEB domains (Burns, et al., 2013; Evans & Owens, 2010; Mitchell, Deshler, & Lenz, 2012; Myers, Simonsen, & Sugai, 2011; Pavri, 2010; Pearce, 2009). Burns, et al. (2013) used an innovative framework to encourage the generalization and maintenance of behavioral changes in teachers. This research looked to developed frameworks for behavioral change as a means to approach teacher training and influence the acceptance of an RTI program. No matter the approach, most research included some form of ongoing training to support teacher implementation of an RTI program greatly improved the fidelity of the program's implementation (see for example Diamond, et al., 2013).

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

Some research (Jeffrey, McCurdy, Ewing, & Polis, 2009; Myers, et al., 2011; Thompson, Marchant, Anderson, Prater, & Gibb, 2012) has looked at using an RTI approach to guide teacher training for RTI implementation. The tiered support for teachers involved additional training and coaching for those not meeting school goals of providing a set amount of behavior-specific praise to students. This tiered training for teachers led to an increased use of praise, with positive results related to student on-task behavior. This study pointed out that voluntary teacher-participation was an important factor (versus principal nomination). Teachers nominated by a supervisor were likely to feel as if they were being targeted.

In addition, the role of special education teachers should be clearly defined. The role of special education teachers in RTI programs has been examined by some (Chamberlain, 2009; Mitchell, et al., 2012), and shown an increasing level of collaboration between special and general education teachers in needed for RTI implementation. Still, despite the fact that special education teacher are often equipped with strategies that are relevant to Tier II and III interventions, only 23% of their day providing direct instruction to students, and an even smaller amount of time collaborating with general education teachers. Instead, a considerable amount of time was spent on paperwork, in IEP and RTI meetings, and assisting in a classroom.

Involvement of a diverse array of school personnel improves success

In addition to teachers, research suggests that other school personnel must be invested in an RTI program in order for it to succeed. Saeki, et al. (2011) points out that limited time and resources “may create resistance from the administration in implementing systematic

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

screening to the entire school population” (p. 51). Others (O’Connor & Freeman, 2012; Pavri, 2010) agree that involved and knowledgeable leadership is an important factor for success

A growing body of research focuses on the role of school psychologists in tertiary interventions. A considerable amount of research (Barnett, et al., 2006; Froiland, 2011; Chafouleas, et al., 2012; Landau & Swerdlik, 2005; O’Connor & Freeman, 2012; Saeki, et al., 2011; Skinner, McCleary, Skolitis, Poncy, & Cates, 2013; Witsken, Stoeckel, & D’Amato, 2008) provides examples and defines potential roles of school psychologists in assisting with tertiary interventions as a means of reducing special education referral. There is also growing interest in the role that school counselors can play (Gruman & Hoelzen, 2011; Berzin & O’Conner, 2010).

Fidelity in implementation of an RTI program must be considered

It seems obvious to state that fidelity of implementation is critical. Many studies (see Benner, Nelson, Sanders, & Ralston, 2012; Erickson, et al., 2012; Fairbanks, et al., 2007) include a specific process to assess the fidelity of an intervention or monitoring program. It is not enough to provide a brief training, and expect implementation to be successful. A school or district must be able to show that an RTI program to address the SEB domains is being implemented with fidelity, both in referral to tiered support and in implementing an intervention, to reduce social and cultural biases (Kauffman, Bruce, & Lloyd, 2012).

The fidelity of referral criteria is problematic, because there is always potential for social or cultural bias to arise (discussed more below). For examples, office discipline referrals are often used for referral to Tier 2 or 3 supports for problem behaviors. In order for these to

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

be successful, they should specifically define the circumstances that an office referral should be used to address problem behavior. Even if such systems are in place, the procedures delineated are not implemented with fidelity, again limiting the utility of ODR data for referrals in the SEB domains (Lane, et al., 2008).

What intervention techniques influence the success of students who may require additional interventions, or special education services related to social-emotional or behavioral needs?

RTI intervention should address the whole student, not part

A successful RTI intervention should consider suspected disabilities, baseline behavior, socioeconomic status and culture. Individuals suspected of having certain disabilities, including Autism Spectrum Disorder and Attention Deficit Hyperactivity Disorder, may need screening procedures specific to the suspected disability, but can benefit from interventions and practices that are part of RTI (Hammond, Campbell, & Ruble, 2013; Haraway, 2012). Socioeconomic status and culture can change how students are treated in referral systems for RTI, in the same way minority overrepresentation for Special Education referrals was a concern prior to IDEIA's passage in 2004 (discussed more below).

Academic performance and behavioral needs often arise concurrently. Ignoring academic deficits when addressing challenging behavior (and vice versa) is problematic. Studies that have attempted to draw conclusions between behavior interventions and academic achievement generally show a decrease in problem behaviors, but have mixed or inconclusive results regarding academic achievement (Benner, et al., 2012; Chafouleas, et

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

al., 2012; Erickson, et al., 2012; Fairbanks, et al., 2007; Oakes, et al., 2012; Weiss, 2013).

Because behavior and academics do not operate in isolation, there is a growing body of research (see for example Kalberg, et al., 2010) that supports the use of screening tools that consider both behavioral needs, as well as academic proficiency.

Features of successful tertiary interventions

Successful interventions used in RTI share many of the same characteristics of successful RTI program implementation (see above). Specific interventions have been shown to reduce problem behaviors. These interventions can be consequence-based (Benner, et al., 2012), antecedent-based (Cihak, Albert, & Fredrick, 2007), increased behavior-specific praise (Myers, et al., 2011; Thompson, Marchant, Anderson, Prater, & Gibb, 2012), social skills training (Oakes, et al., 2012), check-in/check-out programs (Cheney, Flower, & Templeton, 2008; Fairbanks, et al., 2007; McIntosh, Campbell, Carter, & Dickey, 2009), counseling (Saeki, et al. 2011), and social stories (Barnett, et al., 2006).

Still, there is no single approach that can be consistently applied to challenging behavior. Saeki, et al. (2011) explained that, "...for RTI in the behavioral domain, the use of pre- and post-assessment data by itself has been elusive in fully detailing a student's social, emotional, and behavioral functioning" (p. 50). Because problem behaviors are exhibited in different ways and for a variety of different reasons, the use of functional behavior assessments is an important feature of an RTI program, particularly in the upper tiers of support (Cihak, et al., 2007; Fairbanks, et al., 2007; Gresham, 2004; Gresham, et al., 2013; McIntosh, Brown, & Borgmeier, 2008; McIntosh, et al., 2009; Menzies & Lane, 2011). There is no one intervention that holds the key. As Chafouleas, et al. (2012) explained, "For many

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

reasons, it is likely that a one-size-fits-all approach to both method selection and metrics for quantification will not be revealed with regard to social behaviors” (p. 503).

How do referral practices differ between the Discrepancy Model and RTI?

Providing early intervention can serve to reduce special education referrals related to SEB needs by addressing student problems before they are considered for referral to special education services (see for example Saeki, et al., 2011). The benefits of early intervention in early childhood education programs has been demonstrated, particularly related to SEB development and needs (Barnett, et al., 2006; Bayat, Mindes, & Covitt, 2010; Diamond, et al., 2013; Fox, Carta, Strain, Dunlap, & Hemmeter, 2009; Mack, Smith, & Straight, 2010).

Researchers have pointed to reductions in special education referrals as a benefit of RTI, reducing unnecessary medication or labeling, and the stigma associated with students serviced under special education programs (see Froiland, 2011; Pearce, 2009).

Conversely, some research has pointed out that a reduction in special education referrals is detrimental in that it can lead to reduced transition supports that would otherwise be required for students receiving special education services (Thomas & Dykes, 2011). In the end, research has mixed results on whether RTI models in the SEB domains are able to effectively identify students needing special education services.

Implications for diagnosis of Emotional and Behavioral Disorders

As cited in Gresham (2013, p. 21), it is estimated that approximately 20% of children and adolescents experience mental health problems each year in the United States, yet less than 1% of students are provided services for emotional disorders. A significant amount of

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

research was conducted between 2005 and 2008 related to the use of RTI to develop referral processes for emotional and behavioral disorders (Gresham, 2005; Harris-Murri, King, & Rostenberg, 2006; Maag & Katsiyannis, 2008). This cluster of reports and reviews (most recently re-synthesized in Gresham, 2013), all point out significant research needs in this area. Although the end the result of a tertiary RTI program to address SEB domains may ultimately be a referral to special education services, little has been documented about how or whether the use of RTI has changed the overall number of referrals to special education.

One study (Cheney, Flower, & Templeton, 2008) used the metrics established by Gresham (2005) to evaluate responsiveness to behavioral interventions, and evaluate impacts to special education referrals. The study found that the metrics established by Gresham appeared to be successful in reducing referrals and preventing the development of emotional and behavioral disabilities, but pointed to the need for additional research to confirm these findings. There is little quantitative information on how many students are now served for SEB disorders through the use of RTI when compared to discrepancy model. Models exist, but have yet to be widely tested (Gresham, et al., 2013; Hoover, 2010).

Social and cultural bias ever prevalent

While the move to RTI was in part prompted by the disproportionate representation of African Americans and other minority groups in Special Education, RTI presents it's own challenges for minority students, and students with low socioeconomic status. Proctor (2012), outlines the benefits of RTI for African American students, but points out that there are mixed results on whether or not the use of RTI has reduced the overrepresentation of

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

African American students in Special Education programs. One particularly large study (Muyskens, et al., 2007) used a behavior rating scale to assess risk factors for approximately 22,000 students in kindergarten through eighth grade. They found the rating scale to be correlated with suspensions, achievement scores and attendance data during high school years, making it a promising tool for tertiary referrals for challenging behavior. Still, the results showed disproportionate representation of minorities. The researchers acknowledged that the use of rating systems to identify behavioral challenges “will not address concerns over misinterpretation of student behavior due to cultural or racial differences” (p. 40-41).

Speaking specifically about behavioral interventions, another study (Benner, et al., 2012) found that the “benefits of the behavior intervention on behavioral outcomes were smaller in schools serving higher proportions of low socioeconomic students and for students who evinced higher baseline levels of externalizing behavior” (p. 1). Other research (O’Connor & Freeman, 2012) acknowledges that the role of culture and belief systems in a school district should not be overlooked with RTI implementation. Factors such as referral to higher tiers of intervention and eventually to special education often depend not only on the frequency of a particular behavior, but how socially acceptable that behavior is (Pearce, 2009). Because social factors play such a large role in how behaviors are treated and responded to, any RTI program should consider ways to be culturally responsive (Harris-Murri, et al., 2006).

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

References:

- Barnett, D. W., Elliott, N., Wolsing, L., Bunger, C. E., Haski, H., McKissick, C., & Vander Meer, C. D. (2006). Response to intervention for young children with extremely challenging behaviors: What it might look like. *School Psychology Review, 35*(4), 568-582, (EJ788278)
- Bayat, M., Mindes, G., & Covitt, S. (2010). What does RTI (response to intervention) look like in preschool? *Early Childhood Education Journal, 37*, 493-500 (EJ878279)
- Benner, G. J., Nelson, J. R., Sanders, E. A., & Ralston, N.C. (2012). Behavior intervention for students with externalizing behavior problems: Primary-level standard protocol. *Exceptional Children, 78*(2), 181-198 (EJ970676)
- Berzin, S. C., & O'Conner, S. (2010). Educating today's social workers: Are school social work courses responding to the changing context? *Children & Schools, 32*(4), 237-249 (EJ902093)
- Burns, M. K., Egan, A. M., Kunkel, A. K., McComas, J., Peterson, M. M., Rahn, N. L., & Wilson, J. (2013). Training for generalization and maintenance in RTI implementation: Front-loading for sustainability. *Learning Disabilities Research & Practice, 28*(2), 81-88 (EJ1002494)
- Chafouleas, S. M., Sanetti, L. M. H., & Kilgus, S. P. (2012). Evaluating sensitivity to behavioral change using Direct Behavior Rating Single-Item Scales. *Exceptional Children, 78*(4), 491-505 (EJ970692)

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

- Chamberlain, S. P. (2009). An interview with Diane P. Bryant and Manuel Barrera: Changing roles for educators within the framework of response-to-intervention. *Intervention in School and Clinic, 45*(1), 72-79 (EJ850786)
- Cheney, D., Flower, A., & Templeton, T. (2008). Applying response to intervention metrics in the social domain for students at risk of developing emotional or behavioral disorders. *The Journal of Special Education, 48*(2), 108-126 (EJ800763)
- Cihak, D., Alberto, P. A., & Fredrick, L. D. (2007). Use of brief functional behavior analysis and intervention evaluation in public settings. *Journal of Positive Interventions, 9*(2), 80-93 (EJ804310)
- Diamond, K.E., Justice, L.M., Siegler, R.S., & Snyder, P.A. (2013). *Synthesis of IES Research on Early Intervention and Early Childhood Education*. (NCSE 2013-3001). Washington, DC: National Center for Special Education Research, Institute of Education Sciences, U.S. Department of Education. (ED544212)
- Erickson, A. G., Noonan, P. M., & Jenson, R. (2012). The school implementation scale: Measuring implementation in response to intervention models. *Learning Disabilities: A Contemporary Journal, 10*(2), 33-52 (EJ998224)
- Evans, S. W., & Owens, J. S. (2010). Behavioral assessment within problem-solving models: Finding relevance and expanding feasibility. *School Psychology Review, 39*(3), 427-430 (EJ900920)
- Fairbanks, S., Sugai, G., Guardino, D., & Lathrop, M. (2007). Response to intervention: Examining classroom behavior support in second grade. *Exceptional Children, 73*(3), 288-310 (EJ757112)

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

Fox, L., Carta, J., Strain, P., Dunlap, G., & Hemmeter, M.L. (2009). Response to Intervention and the Pyramid Model. Tampa, Florida: University of South Florida, Technical Assistance Center on Social Emotional Intervention for Young Children

Froiland, J. M. (2011). Response to intervention as a vehicle for powerful mental health interventions in the schools. *Contemporary School Psychology, 15*, 35-42 (EJ934704)

Gresham, F. M. (2004). Current status and future directions of school-based behavioral interventions. *School Psychology Review, 33*(3), 326-343 (EJ683538)

Gresham, F. M. (2005). Response to intervention: An alternative means of identifying students as emotionally disturbed. *Education and Treatment of Children, 28*(4), 328-344 (EJ727437)

Gresham, F. M. (2007). Response to intervention and emotional and behavioral disorders: Best practices in assessment for intervention. *Assessment for Effective Intervention, 32*(4), 214-222 (EJ793341)

Gresham, F. M., Hunter, K. K., Corwin, E. P., & Fischer, A. J. (2013). Screening, Assessment, Treatment, and Outcome Evaluation of Behavioral Difficulties in an RTI Model. *Exceptionality: A Special Education Journal, 21*(1), 19-33 (EJ994721)

Gruman, D. H., & Hoelzen, B. (2011). Determining responsiveness to school counseling interventions using behavioral observations. *Professional School Counseling, 14*(3), 183-190 (EJ952184)

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

- Hammond, R. K., Campbell, J. M., & Ruble, L. A. (2013). Considering identification and service provision for students with Autism Spectrum Disorders within the context of Response to Intervention. *Exceptionality, 21*(1), 34-50 (EJ994719)
- Haraway, D. L. (2012). Monitoring students with ADHD within the RTI framework. *The Behavior Analyst Today, 13*(2), 17-21 (EJ1004993)
- Harris-Murri, N., King, K., & Rostenberg, D. (2006). Reducing disproportionate minority representation in special education programs for students with emotional disturbances: Toward a culturally responsive response to intervention model. *Education and Treatment of Children, 29*(4), 779-799 (EJ778082)
- Hoover, J. J. (2010). Special education eligibility decision making in response to intervention models. *Theory Into Practice, 49*, 289-296 (EJ901135)
- Jeffrey, J. L., McCurdy, B. L, Ewing, S., & Polis, D. (2009). Classwide PBIS for students with EBD: Initial evaluation of an integrity tool. *Education and Treatment of Children, 32*(4), 537-550
- Kalberg, J. R., Lane, K. L., & Menzies, H. M. (2010). Using systematic screening procedures to identify students who are non-responsive to primary prevention efforts: Integrating academic and behavioral measures. *Education and Treatment of Children, 33*(4), 561-584
- Kauffman, J. M., Bruce, A, & Lloyd, J. W. (2012). Response to intervention (RTI) and students with emotional and behavioral disorders. In A. Rotatori, *Behavioral Disorders: Practice, Concerns and Students with EBD*, (vol. 23, pp. 107-128). Bingley, West Yorkshire: Emerald Group Publishing, Limited (ED539367)

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

- Landau, S., & Swerdlik, M. E. (2005). Commentary: What you see is what you get: A commentary on school-based direct observation systems. *School Psychology Review, 34*(4), 529-536 (EJ788225)
- Lane, K. L., Kalberg, J. R., Parks, R. J., & Carter, E. W. (2008). Student risks screening scale: Initial evidence for score reliability and validity at the high school level. *Journal of Emotional and Behavioral Disorders, 16*(3), 178-190 (EJ805113)
- Maag, J. W., & Katsiyannis, A. (2008). The medical model to block eligibility for students with EBD: A response-to-intervention alternative. *Behavioral Disorders, 33*(3), 184-194 (EJ888356)
- Mack, F. R., Smith, V. G., Straight, H. (2010). Response to intervention: Implications for the proficiency of early childhood educators. *The Journal of the International Association of Special Education, 11*(1), 15-21 (EJ947828)
- McIntosh, K., Brown, J. A., & Borgmeier, C. J. (2008). Validity of functional behavior assessment within a response to intervention framework. *Assessment for Effective Intervention, 34*(1), 6-14 (EJ817763)
- McIntosh, K., Campbell, A. L., Carter, D. R., & Dickey, C. R. (2009). Differential effects of a tier two behavior intervention based on function of problem behavior. *Journal of Positive Behavior Interventions, 11*(2), 82-93 (EJ830435)
- Menzies, H. M., & Lane, K. L. (2011). Using self-regulation strategies and functional assessment-based interventions to provide academic and behavioral support to students at risk within three-tiered models of prevention. *Preventing School Failure, 55*(4), 181-191 (EJ934842)

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

- Mitchell, B. B., Deshler, D. D., & Lenz, B. K. B. (2012). Examining the role of the special educator in a response to intervention model. *Learning Disabilities: A Contemporary Journal, 10*(2), 53-74 (EJ998225)
- Muyskens, P, Marston, D., Reschly, A. L. (2007). The use of response to intervention practices for behavior: An examination of the validity of a screening instrument. *The California School Psychologist, 12*, 31-45 (EJ896643)
- Myers, D. M., Simonsen, B., & Sugai, G. (2011). Increasing teachers' use of praise with a response-to-intervention approach. *Education and Treatment of Children, 34*(1), 35-59 (EJ907149)
- O'Connor, E. P., & Freeman, E. W. (2012). District-level considerations in supporting and sustaining RTI implementation. *Psychology in the Schools, 49*(3), 297-310 (EJ989959)
- Oakes, W. P., Lane, K. L., Cox, M., Magrane, A., Jenkins, A., & Hankins, K. (2012). Tier 2 supports to improve motivation and performance of elementary students with behavioral challenges and poor work completion. *Education and Treatment of Children, 35*(4), 547-584 (EJ999347)
- Pavri, S. (2010). Response to Intervention in the social-emotional-behavioral Domain: Perspectives from Urban Schools. *TEACHING Exceptional Children Plus, 6*(3), Article 4 (EJ879596)
- Pearce, L. R. (2009). Helping children with emotional difficulties: A response to intervention. *Rural Educator, 30*(2), 34-46 (EJ869307)

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

- Proctor, S. L., Graves, S. L., Jr., & Esch, R. C. (2012). Assessing African American students for specific learning disabilities: The promises and perils of Response to Intervention. *The Journal of Negro Education, 81*(3), 268-282 (EJ998554)
- Saeki, E., Jimerson, S. R., Earhart, J., Hart, S. R., Renshaw, T, Singh, R. D., & Stewart, K. (2011). Response to Intervention (RTI) in the social, emotional, and behavioral domains: Current challenges and emerging possibilities. *Contemporary School Psychology, 15*, 43-52 (EJ934705)
- Skinner, C. H., McCleary, D. F., Skolits, G. L., Poncy, B. C., & Cates, G. L. (2013). Emerging opportunities for school psychologists to enhance our remediation procedure evidence base as we apply response to intervention. *Psychology in the Schools, 50*(3), 272-289 (EJ1009779)
- Sugai, G., & Horner, R. (2009). Responsiveness-to-intervention and school-wide positive behavior supports: Integration of multi-tier system approaches. *Exceptionality, 17*(4) p. 223-237, (EJ870486)
- Thomas, S. B., & Dykes, F. (2011). Promoting successful transitions: What can we learn from RTI to enhance outcomes for all students? *Preventing School Failure, 55*(1), 1-9 (EJ903738)
- Thompson, M. T., Marchant, M., Anderson, D., Prater, M. A., & Gibb, G. (2012). Effects of tiered training on general educators' use of specific praise. *Education and Treatment of Children, 35*(4) 521-546 (EJ999344)

USE OF RTI IN SOCIAL, EMOTIONAL AND BEHAVIORAL DOMAINS

- Volpe, R. J., & Gadow, K. D. (2010). Creating abbreviated rating scales to monitor classroom inattention-overactivity, aggression, and peer conflict: Reliability, validity, and treatment sensitivity. *School Psychology Review, 39*(3), 350-363 (EJ900914)
- Weiss, S. L. (2013). Learning-related behaviors: Small group reading instruction in the general education classroom. *Intervention in School and Clinic, 48*(5), 294-302 (EJ1011776)
- Witsken, D., Stoeckel, A., & D'Amato, R. C. (2008). Leading educational change using a neuropsychological response-to-intervention approach: Linking our past, present, and future. *Psychology in the Schools, 45*(9), 781-798 (EJ818230)