Ethical and legal issues associated with using response-to-intervention to assess learning disabilities☆

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Abstract

The Individuals with Disabilities Education Improvement Act of 2004 allows schools to use a child’s response to research-based intervention (RTI) as a part of procedures to identify students with learning disabilities. This paper considers whether RTI-based assessment models meet ethical and legal standards for acceptable assessment practices. Based on a review of available research, it was concluded that RTI-based assessment practices, when carefully crafted and implemented, have the potential to be multifaceted, fair, valid, and useful. Threats to acceptable RTI-based assessment practices include: the lack of research-based interventions appropriate for diverse academic domains, ethnic groups, grades K-12, and students with limited English proficiency; uncertainty regarding how to determine when nonresponse to intervention warrants formal referral for evaluation of special education eligibility; difficulty translating scientifically sound RTI practices to the local school level; and inadequate staff training and poor treatment fidelity. Suggested directions for future research are included.

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In the 2004 amendments to the Individual’s With Disabilities Education Act (IDEA) Congress responded to long-standing criticisms of the IQ-achievement discrepancy model for identifying children with specific learning disabilities. Although the definition of specific learning disability remains unchanged, the law now states that local educational agencies (LEAs):

\[ \text{\ldots shall not be required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability in oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, mathematical calculation, or mathematical reasoning. (Pub. L. No. 108–446 § 614 [b][6][A]).} \]

The law goes on to say that an LEA “may use a process that determines if the child responds to scientific, research-based intervention as a part of the evaluation procedures” (Pub. L. No. 108–446 § 614 [b][6][A]; § 614 [b][2 & 3]). Thus, under IDEA schools may use a response-to-intervention (RTI) model as part of the process of identifying students as LD and subsequently eligible for special education services. Moreover, IDEA also allows school districts to use up to 15% of their federal special education funds each year to develop and implement coordinated early intervening services. These services are for students in all grades who require additional academic and behavior support to be successful in general education, but who have not been identified as needing special education and related services (Pub. L. No. 108–446, § 613 [f]).

The RTI process generally involves providing effective instruction for students within general education, monitoring student progress, providing different or more intense services for children who do not demonstrate adequate progress, again monitoring progress, and those who still do not respond adequately will either qualify for special education services or for a special education eligibility evaluation (Fuchs, Mock, Morgan, & Young, 2003). Special education attorneys encourage schools to consult the professional literature as well as law for operational definitions of RTI terms (Alexander, 2006), and to locate exemplary procedural protocols for using RTI in the LD eligibility decision making process (e.g., Batsche et al., 2005; Reschly, Hosp, & Schmied, 2003). Schools that adopt clear definitions of RTI terms, along with carefully crafted policies and procedural protocols for implementation of RTI, are more likely to make LD eligibility decisions that benefit children and withstand court challenges. However, many essential aspects of RTI remain vaguely defined in the literature (Burns & Ysseldyke, 2005). Therefore, the goal of this paper is to evaluate the ethical and legal issues associated with the use of RTI as an LD diagnostic approach including ethical and legal obligations with regard to parent involvement and consent, and development and implementation of RTI protocols that are likely to both benefit children and withstand court challenges. Finally, challenges for the profession and areas for future research are identified.

Legally defensible practices for interventions

As noted above, under IDEA, 2004 schools may now use a process that determines if the child responds to scientific, research-based interventions as a part of the evaluation
procedures for LD eligibility determination. The phrase scientific, research-based interventions is not defined within IDEA, but is defined by the No Child Left Behind Act of 2001 (NCLB, Pub. L. No. 89–10) as research that:

1. employs systematic, empirical methods that draw on observation or experiment;
2. involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;
3. relies on measurements or observational methods that provide valid data across evaluators and observers and across multiple measurements and observations; and
4. has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review. (20 U.SC 6368).

NCLB identifies five components of “effective reading instruction,” based on the findings of the National Reading Panel (2000): phonemic awareness, phonics, vocabulary development, reading fluency, and reading comprehension strategies (NCLB, 20 USC 6368 [3]), that were subsequently referenced in IDEA, 2004 (Section 614[b][5]). However, federal laws provide little guidance regarding effective instruction in mathematics or other LD domains. Therefore, when selecting interventions, preference should be given to interventions described in the peer-reviewed professional literature and found to be effective. A reliance on applied learning sciences in making treatment choices is consistent with the ethical responsibilities of psychologists. The National Association of School Psychologists’ Principles for Professional Ethics (2000) requires school psychologists to use “methods that the profession considers to be responsible, research-based practice (NASP-PPE, IV,C, #4). Similarly, the American Psychological Association’s (APA, 2002) Ethical Principles of Psychologists and Code of Conduct (EP) states that “psychologists’ work is based upon established scientific and professional knowledge of the discipline” (Standard 2.04, also Preamble).

Timing considerations: parent involvement and consent

The RTI process is generally considered to operate within three tiers (Burns, Deno, & Jimerson, in press), with Tier I being effective instruction within general education and Tier II being interventions delivered in small groups through either standard protocols or individualized problem-solving (Marston, 2003). These interventions are appropriate when the student experiences academic or behavioral difficulties, but there is no reason to suspect he or she has a disability and needs special education and related services (Alexander, 2006). Under IDEA, 2004, screening of a student by a teacher or specialist to determine appropriate instructional strategies for curriculum implementation is not considered to be an evaluation requiring parental consent in that nothing occurs beyond the authority of the general education teacher (Alexander, 2006).

Although IDEA does not require parental consent for the school psychologist to review student records, participate in student screening, or provide consultation to the teacher or problem solving team, ethically practitioners have an obligation to advise parents if ongoing involvement with their child is anticipated (NASP-PPE, III,C,#2). Parental consent
should be obtained if the psychologist’s activities involve an intrusion on student or family privacy beyond what might be expected during ordinary classroom activities (Corrao & Melton, 1988). Although there are specific recommended practices for including parents in RTI (Reschly, Coolong-Chaffin, Christenson, & Gutkin, in press), research is needed to identify the ways in which parent involvement can improve intervention outcomes for the child and reduce the likelihood of school-parent conflicts.

Tier III involves more intensive interventions delivered by specialists with a small student-to-teacher ratio (Marston, 2003). If, at any point during the RTI process a student is suspected of having a disability and needs special education services to be successful, then the school is required to conduct an individual evaluation in accordance with IDEA procedures and timelines (60 calendar days or the timelines established by the state). If parents request a special education eligibility evaluation during the RTI process and the school decides not to evaluate the child, the school must provide parents written notice of the refusal to evaluate.

In Johnson v. Upland (2002) parents of a student with a disability sought reimbursement for private school placement, alleging that the school’s use of less drastic interventions resulted in an unreasonable delay in the provision of an appropriate education under IDEA. The court ruled in favor of the school, explicitly noting that the student was not denied a basic floor of opportunity because he was making academic progress during the period of pre-referral interventions. The judge’s opinion supported state and school policy that encouraged use of less drastic alternatives prior to evaluation for special education. Although the Johnson opinion is reported in case digests, it was designated as “unpublished,” meaning that it may not be cited as legal precedent except in accordance with the rules of the Johnson v. Upland (2002, p. 690). However, the Johnson case could signal a possible direction of the courts, namely that the RTI process will be not be seen as an unreasonable delay in the determination of special education eligibility as long as academic progress is documented and a referral for evaluation is made as soon as a disability is suspected.

Ethical codes and standards for professional practice require the informed consent of the parent (or student if of the age of majority) prior to initiating an individual psychological testing or assessment procedure, and consent, oral or written, should be appropriately documented (APA, 2002; American Educational Research Association [AERA], APA, & National Council on Measurement in Education [NCME], 1999, p. 85). Under IDEA, written parental consent is needed for the initial pre-special education placement evaluation. In addition, consistent with the broad ethical principle of respect for autonomy, it is appropriate to involve the student as much as feasible in treatment decisions, particularly if intensive individual interventions are under consideration. Affording students choices in selecting treatments is not only ethically appropriate, but research suggests that involving the student may lead to enhanced motivation and an increased sense of personal responsibility for achievement (Jacob & Hartshorne, 2007).

The ethics of psychological assessment and RTI

In addition to scientifically researched-based interventions, the term RTI involves measuring student response to those interventions and basing subsequent decisions on information from treatment results (Reschly et al., 2003). The RTI model identifies children as LD through a dual discrepancy defined as (a) documented slow rate of learning usually operationalized as at
least one standard deviation below the average growth rate for the general education population (Fuchs, 2003), and (b) large differences from age or grade expectations in the skill level even after high quality, scientifically based interventions are put in place (Gresham et al., 2005).

Although using response to intervention for instructional decisions is not a new concept (e.g., Fuchs & Fuchs, 1998; Vellutino et al., 1996), using RTI data for formal eligibility decisions represents a different data use than previously validated. For this reason, it is necessary to evaluate whether the use of RTI to assist in special education decision-making is consistent with ethical and legal standards for acceptable assessment practices. Jacob and Hartshorne (2007) identified five broad ethical and legal concerns that emerged from an analysis of the Standards for Educational and Psychological Testing (AERA et al., 1999), codes of ethics, and federal laws addressing psychological assessment. Specifically, psychologists must strive to ensure that psychoeducational evaluations are multifaceted, comprehensive, fair, useful, and valid. According to its authors, the Standards for Educational and Psychological Testing apply “most directly” to traditional tests, but it is appropriate and informative to evaluate less standardized assessment practices such as RTI using the same fundamental concepts and principles (p. 3).

**Multifaceted**

Psychoeducational assessment of a child with learning or behavior problems must be based on a variety of different types of information from different sources. Under IDEA, evaluation procedures must include “a variety of assessment tools and strategies to gather relevant functional, developmental, and academic information, including information provided by the parent” (Pub. L. No 108–466 § 614 [b][2][A]). In accordance with codes of ethics, practitioners are obligated to “use multiple assessment methods such as observations, background information, and information from other professionals, to reach comprehensive conclusions” (NASP-PPE,IV,C,#3), and their opinions must be based on “information and techniques sufficient to substantiate their findings” (APA, 2002, EP 9.01). No important decisions (e.g., special education eligibility) should be made on the basis of a single test score or assessment (Pub. L. No 108–466 § 614 [b][2][B]; Standards 13.7).

Over 20 years ago Messick (1984) suggested that ethically a child should not be exposed to the risk of misdiagnosis unless deficiencies in instruction have first been ruled out. To be truly multifaceted, RTI will have to translate Messick’s suggestion into practice. Examining factors of the instructional environment that are related to student outcomes and are measurable and malleable is one of the basic tenets of RTI (Gresham, 2001; Gresham et al., 2005). It may be that many children are experiencing difficulties due to lack of exposure to early fundamental literacy or mathematics skills, marginally effective general education reading curricula, or instruction that is not scientifically validated or is implemented with poor integrity. These potential causes of learning difficulties must be evaluated and ruled out (Burns & Ysseldyke, 2005). Although there are several approaches to evaluate the quality of general education instruction (e.g., Haager, Gersten, Baker & Graves, 2003; Ysseldyke & Christenson, 2002), assuring a quality instructional environment may very well be one of the greatest challenges to successful RTI implementation (Burns, 2007).
Despite the emphasis on using data from various sources to drive instruction within RTI, many approaches rely solely on curriculum-based measurement (CBM; Deno, 1985) to assess student response to intervention (Burns & Ysseldyke, 2005; Gresham, 2001). Although CBM is a critical component of effective problem-solving models (Shinn, 2002), using only one source of data seems inconsistent with the requirement for multi-faceted evaluation data. Instead, multiple formative and outcome measures should be used. For example, phonemic awareness, phonetic segmentation, and orthographic skills such as letter coding, letter cluster, and word recognition may need to be assessed and monitored for a child with reading difficulty, followed by direct instruction and strategy training as needed (Gresham et al., 2005). Additional research is needed to determine what types of formative and outcome data, in addition to CBM scores, are most likely to result in sound RTI decision-making for various academic domains.

Comprehensive

IDEA requires “a full and individual initial evaluation” prior to providing special education services (Pub. L. No 108–466 § 614 [a][1][A]). Children with suspected disabilities must be assessed “in all areas related to the suspected disability” (§ 614 [b][3] [B]), including, if appropriate, health, vision, hearing, social and emotional status, general intelligence, academic performance, communicative status, and motor abilities.

The House and Senate committee reports that accompanied the bills to amend IDEA noted the problem of widespread misuse of psychological tests, particularly intelligence measures, in the identification of children for special education eligibility (U.S. House of Representatives Report 108–77; Klotz & Nealis, 2005). It is reasonable to predict that RTI will reduce the reliance on intelligence tests in the identification of children as LD. The direct measurement of achievement, behavior, and the instructional environment should be the focus of a comprehensive evaluation based on an RTI model (Gresham et al., 2005), with measures and domains determined by their relationship to positive child outcomes, not just predictions of the student’s success or failure.

Proponents for RTI point out that IDEA continues to ensure a student’s right to a comprehensive assessment (Gresham et al., 2005). The collection of response-to-intervention data is not in and of itself a “full” individual assessment. A comprehensive evaluation based on an RTI model could include screening child characteristics that might affect achievement (vision, hearing, etc.), conducting in-depth assessments in the aforementioned areas, or if not needed, then directly assessing current skills, instructional environments, and behaviors (Gresham et al., 2005). In other words, a comprehensive assessment within RTI could include assessments of teachable skills, acquisition and performance, prior and current instructional opportunities, and instructional variables such as time allocated for instruction, academic learning time, pace of instruction, number of opportunities to respond, and sequencing of examples and nonexamples of skills.

In some cases, RTI will not provide all the information needed for eligibility determination and classification. For example, to rule out mental retardation, a comprehensive evaluation might include standardized norm-referenced tests, and/or measures of adaptive behavior if such measures are deemed necessary by the school psychologists or others involved in eligibility and classification.
Fair

In the selection of assessment tools and procedures, the psychologist strives to choose the most appropriate instruments and procedures in light of the child’s age, gender, native language, disabilities, socioeconomic status, and ethnic background (NASP-PPE, IV, C, #1; APA, 2002). IDEA requires that assessment and other evaluation materials must be “selected and administered so as not to be discriminatory on a racial or cultural basis” (Pub. L. No 108-466 § 614 [b][3][A][i]). In addition, assessments “are provided and administered in the language and form most likely to yield accurate information on what the child knows and can do academically, developmentally, and functionally, unless it is not feasible to so provide or administer” (§ 614 [b][3][A][ii]).

Fair RTI assessment of children from linguistically diverse backgrounds will require information about the child’s language proficiency, dominance, and degree of acculturation prior to selecting interventions (Paredes Scribner, 2002). For children who come from homes where English is not the primary language, it is important to assess the spoken and written language skills in both the child’s native and English language (Lopez, 1997). This language proficiency information should guide selection of RTI interventions and interpretation of outcome measures.

Similarly, fair RTI assessment of children who may have hearing, vision, or other sensory-motor limitations requires assessment of these areas prior to selecting interventions. For example, an intervention that involves directed rehearsal to teach letter-sound associations to a child with an unrecognized hearing or vision loss invites frustration, failure, and misdiagnosis.

Advocates of the RTI approach to identifying children with LD have suggested it will likely be fairer than IQ-discrepancy models to students from diverse backgrounds because it involves less reliance on standardized testing (Fuchs, 2003). However, standardized tests do not inexorably lead to biased decisions and reducing a reliance on them may not automatically result in fairer decisions. Messick (1980) identified a number of different types of bias in assessment. One type, bias in clinical application, concerns fairness in administration, interpretation, and decision making. Researchers should consider whether studies of RTI show differences in the number, duration, quality, or integrity of interventions for students from various ethnic, racial, or linguistic groups.

Systematic screening and use of CBM procedures were suggested as ways to reduce some of the bias that exists in referral and identification of LD (Vaughn & Fuchs, 2003) because previous research found that using CBM oral reading fluency measures resulted in little gender and ethnic bias (Speece, Case, & Molloy, 2003). This addresses a second type of bias, fairness of consequences (Messick, 1980), which involves appraisal of the outcomes of using a particular assessment tool or technique for a particular group. In other words, will RTI assessment practices reduce the disproportionate identification of ethnic and linguistically diverse children as LD?

Using the traditional IQ-achievement discrepancy model, African–American, Hispanic, and Native American children are identified as LD at a rate that significantly exceeds that of Caucasian children, but Asian–American children are comparatively less frequently identified (Hosp & Reschly, 2004). However, previous research found that the number of children who were identified as needing the most intensive interventions, and thus labeled
as LD within an RTI framework, equally represented various ethnic and cultural groups including children who were white (Burns & Senesac, 2005). Specifically, a study that examined an RTI model implemented within 20 rural, urban, and suburban schools found that 23% of Caucasian children identified as at-risk were referred for special education eligibility (15% were placed), as compared to 15% of African–American children identified as at-risk (9% were placed; Gravois & Rosenfield, 2002). A comparison school not using an RTI model within this same study reported a referral rate of 88% among African–American at-risk children, 59% of whom were placed into special education (Gravois & Rosenfield, 2002). Similarly, before implementing an RTI model, approximately 55% of children from a minority group in one school district were identified as at-risk for reading failure, as compared to approximately 10% of Caucasian children. The prevalence of at-risk identification among children from the minority group decreased to less than 10% after implementing RTI (VanDerHeyden & Witt, 2005).

Because RTI does not rely solely on standardized tests, it would seem that cultural or racial biases can be addressed by competent practitioners who are knowledgeable of the child’s background. However, practitioners should not simply operate “from the assumption of the universality of intervention effectiveness” (Kratochwill & Stoiber, 2002, p. 365). Ethically, psychologists are obligated to seek awareness of how cultural and experiential factors may influence a student’s learning (Jacob & Hartshorne, 2007) and select materials and individualize procedures in light of this knowledge. Previous research suggested that RTI precluded both bias in clinical application and in fairness of consequences. Thus, while an assessment process focused on intervening and measuring response has the potential to reduce age, gender, native language, socioeconomic, and cultural bias, research in this area is yet to be conclusive and additional inquiry is needed.

The general ethical principle of justice suggests that school psychologists not only strive for fairness and non-discrimination in the delivery of services, but also seek to ensure that all students can benefit from what psychology has to offer (APA, 2002). For this reason, future research might examine whether equal access to RTI and its potential benefits are being achieved across schools, settings, and with diverse student populations. For example, research could examine school demographics to assess whether RTI is being used with equal regularity in schools that serve low-income versus more affluent students, and whether it has been implemented across diverse student populations (e.g., high school age, limited English proficiency, etc.). Such research also could provide information on teacher and school psychologist background characteristics as they relate to student demographics in an effort to better evaluate the preparedness of professionals to use RTI as a fair method of eligibility determination across settings and with diverse student clientele.

**Useful**

Evaluation procedures must be selected to provide a profile of the child’s strengths and difficulties to aid in instructional planning. IDEA states that assessment tools and strategies must “provide relevant information that directly assists persons in determining the educational needs of the child” (Pub. L. No 108–466 § 614 [b][3][C]). The assessment is planned to ensure the information gathered will result in maximum feasible assistance to the child (NASP-PPE,IV,C,#2,#7).
RTI models could be useful to children who do not ultimately qualify as LD through successful high quality interventions because meta-analytic research found that implementing RTI models led to strong effects for increased student learning (Burns, Appleton, & Stehouwer, 2005). In addition, observing and measuring the student’s improved learning may alter teacher perceptions of the student’s ability to profit from instruction and the student’s sense of self-efficacy (Bransford, Delclos, Vye, Burns, & Hasselbring, 1987). Furthermore, teachers may learn new intervention methods that can be used with other students who are struggling to master certain skills and concepts.

Although implementing RTI led to a reduction in referrals to and/or placements in special education (Kovaleski, Tucker, & Duffy, 1995; Marston, Muyskens, Lau, & Canter, 2003; McNamara, 1998; McNamara & Hollinger, 2003; Reschly & Starkweather, 1997; Sornson, Frost, & Burns, 2004; Tilly, 2003), the total number of students assisted through pre-referral and special education remained relatively stable (Kovaleski et al., 1995; Marston et al., 2003). Thus, a decrease in special education involvement did not translate to a reduction in student support. Moreover, implementing RTI led to schoolwide increases in student scores on state accountability tests (Heartland, 2004; Sornson et al., 2004) and a schoolwide reduction in the number of student grade retentions (Kovaleski et al., 1995). Students who participated in an RTI process and found to be adequately responsive experienced improved reading skills (Marston et al., 2003; Tilly, 2003), improved adaptive behavior (Reschly & Starkweather, 1997), and increased time on task, task comprehension, and task completion (Kovaleski, Gickling, & Morrow, 1999).

For pupils who are determined to be eligible for special education services, RTI data could also be useful in developing several components of the IEP. IDEA requires the IEP team to develop a written statement of (a) the child’s present levels of academic achievement and functional performance (b) measurable annual goals, including academic and functional goals (c) how the child’s progress toward meeting the annual goals will be measured and (d) the special education and related services and supplementary aids and services, based on peer-reviewed research to the extent practicable, to be provided to the child, or on behalf of the child (Pub. L. No 108–466 § 614 [d][1][A]). Data obtained through the RTI process could be useful for these four purposes and could more directly link resources with student needs (Tilly, 2002). Moreover, special education services within existing RTI models increased in number of services offered to each child and became more intense (Ikeda & Gustafson, 2002; Reschly & Starkweather, 1997), happened at earlier grades (Reschly & Starkweather, 1997), and were more cost effective (Sornson et al., 2004).

Valid

School psychologists are obligated to select tests and other evaluation procedures that meet high professional standards and that have been validated for the purpose for which they are used (NASP-PPE, IV,C,#2; also Pub. L. No 108–466 § 614 [b][3][A][iii]; APA, 2002; AERA et al., 1999, pp. 9–24). To ensure reliable and valid findings, IDEA also requires that assessment and evaluation materials be administered by trained and knowledgeable personnel, in accordance with any instructions provided by the producer of such assessments (Pub. L. No 108–466 § 614 [b][3][A][iv & v]). Validity refers to the degree in which an assessment procedure measures what it purports to measure, and no
assessment tool or procedure is valid “for all purposes or in the abstract” (Sattler, 2001, p. 115). Because student response data obtained through the RTI process could be used for eligibility decisions (Barnett et al., 1999; Ikeda & Gustafson, 2002; Marston et al., 2003), the validity and threats to validity of these decisions require examination.

Evidence of the validity of RTI problem-solving protocols for LD decision making

RTI protocols must be carefully crafted, and intervention planning should be based on a scientific problem-solving process that involves identifying and clarifying the problem, generating solutions, and measuring outcomes (Burns et al., in press). Formative assessments with curriculum-based assessments (CBA) and measurements (CBM) are critical components of any RTI model (Burns, Dean, & Klar, 2004; Burns & Ysseldyke, 2005; Gresham, 2002) and research has consistently demonstrated the instructional utility of these measures (Burns, in press; Fuchs & Fuchs, 1986; Shinn, 2002). Moreover, CBA and CBM result in data that have been shown to be reliable for many populations and to lead to valid educational decisions (Burns, 2004; Marston, 1989). However, recent research has examined the role of measurement error in CBM data and how that could affect educational decisions (Christ, 2006). Therefore, additional research is needed that applies psychometric concepts and principles to data used within the RTI framework.

In addition to using reliable and valid measures, decisions based on RTI data should also be empirically validated. Previous research found that mean reading scores on a standardized norm-referenced test of reading for children identified as non-responsive with CBM data were significantly lower than the scores for those who were identified as responsive despite similar pre-intervention reading skills (Burns & Senesac, 2005). Additionally, students identified as non-responsive in an RTI model were more deficient on measures of phonological processing, academic competence, and social skills than those students identified as learning disabled through the traditional discrepancy model diagnostic approach (Speece & Case, 2001). An inability to differentiate students who were LD from poor readers who were not LD was a common criticism of the traditional discrepancy model diagnostic approach (Aaron, 1997; Stanovich & Siegel, 1994), but this criticism seems less warranted for RTI diagnostic approaches.

Evidence of validity of treatments

In 1999, the Task Force on Evidence-Based Interventions (Task Force) was formed as a result of a joint effort by the Division of School Psychology of the APA and the Society for the Study of School Psychology (Carlson & Christenson, 2005; Gutkin, 2002). One goal of the Task Force is to create a framework for rating the level of research evidence for school interventions that could be applied in five content domains, including academic intervention programs. A set of scientifically-sound guidelines for rating the research evidence in support of various interventions will ultimately allow the field of school psychology to establish a compilation of established or promising evidence-based interventions for diverse student/family/school problems.

In addition to compiling established or promising evidence-based interventions for diverse student/family/school problems, another goal of the Task Force is to disseminate their findings to trainers and practitioners in user-friendly language and accessible venues. Unfortunately, this aspect of the project is still in the beginning stages. Task Force
publications and updates are available at their website: http://www.sp-ebi.org, but several other sources for evidence-based interventions exist and are somewhat accessible to practitioners. For example, academic interventions are listed at the Scientifically Based Interventions website (www.GoSBR.net), Intervention Central, www.interventioncentral.org, What Works Clearing House (www.whatworks.ed.gov) and the Florida Center for Reading Research (www.fcrf.org). They also can be located via traditional journal search and in the best practices literature (e.g., Thomas & Grimes, 2002). Furthermore, even when a variety of interventions are available to address a particular academic problem, practitioners will need to consider whether it is likely to be successful given the supports and resources of their setting, as well as the individual characteristics of the student (Kratochwill & Stoiber, 2002).

Meta-analytic research found several interventions that demonstrated strong mean effects for children with learning difficulties (Kavale & Forness, 2000; Swanson, 1999, 2000; Swanson, Hoskyn, & Lee, 1999) including mnemonic strategies, various interventions for reading comprehension (e.g., cognitive, cognitive-behavioral, vocabulary, pre-and mid-reading, and direct instruction), behavior modification, and direct instruction (Kavale & Forness, 2000). Research also has demonstrated effective interventions for children from various ethnic and linguistic groups (VanDerHeyden & Burns, 2005). However, how frequently effective interventions are used within RTI and with what level of fidelity remains as of yet unknown. In addition, treatment fidelity, adherence to key events within the RTI model, and valid measures of student outcomes all could affect the validity of the decisions made from an RTI framework (Barnett et al., 2006). Thus, additional research is needed to examine with what frequency treatments and procedures are implemented correctly in addition to further psychometric research to examine the data used for RTI decisions.

**Threats to Validity**

Treatment fidelity is one potential threat to validity. Teachers and psychologists must be trained to use an RTI model, carry out the interventions precisely, and reliably measure the resulting changes in student performance. This may mean extensive training for teachers and other school personnel (Burns & Ysseldyke, 2005) especially given the consistent finding of implementation infidelity associated with problem-solving and prereferral intervention teams (Burns, Vanderwood, & Ruby, 2005). McCook (2006) recommends that a teacher, principal, psychologist or other be responsible for observing teachers to monitor treatment integrity. However, tensions may arise between the need to document treatment fidelity, and teacher concerns that such data might be used inappropriately by school administrators to evaluate teachers (e.g., discharge teachers). Consequently, to respect teacher concerns, gain their active cooperation, and prevent potential problems, a psychologist or trained observer would be preferable to the principal for monitoring treatment fidelity, and RTI policies should clarify the ways in which RTI fidelity data may and may not be used.

Teachers will also need access to the support and resources necessary to implement RTI, individualize instruction and monitor progress. Fortunately, the IDEA funds available under early intervening services may be used to address this particular issue. Future research examining whether an association exists between the types and levels of RTI support provided to teachers and treatment fidelity may point to specific ways in which schools could improve their support for teachers during the RTI process. To better identify the in-service
training needs that exist, future researchers also might explore the relationships among the nature and types of RTI training provided, feelings of efficacy, and effective implementation of the RTI process.

Another threat to the validity of decisions made with RTI data could be the policy decision regarding what level of nonresponse is necessary to warrant an LD diagnosis. The over-identification of children as LD has been a persistent difficulty (U.S. Department of Education, Office of Special Education Programs, 2002) because approximately 50% of children who receive special education services today are identified as LD and the number has increased by 300% since the 1976–1977 school year (Lerner, 2003). If the bar for determining failure to respond to interventions is set too low, it is likely that too many children will be referred for a comprehensive evaluation for suspected learning disabilities. However, if the bar for “failure to respond to interventions” is set too high, development and implementation of an individualized education program (IEP) will be delayed for some children. The standard with which non-responsiveness will be judged will be a policy decision much like previous LD diagnostic criteria (Ysseldyke, 2005). Empirical data exist to examine the validity of various non-responsive criteria (Fuchs, 2003), but little is known about the effect the chosen criteria would have on the frequency with which students would be identified as LD.

Challenges to researchers and practitioners

Use of RTI in LD eligibility decision making poses many ethical and legal challenges to school psychology. First, if we hope to implement the RTI model successfully as a framework for identifying students with LD, experts in the field of school psychology must compile, evaluate, and disseminate evidence-based interventions appropriate for all LD academic domains, for grades K-12, and for students with limited English proficiency. Consistent with our ethical obligations and sound practice, practitioners must consider the unique cultural, racial, or other characteristics of students so that they can select the best available interventions for the individual student. Second, RTI problem-solving protocols for academic problems and LD eligibility must be further developed, evaluated, and disseminated. Such problem-solving protocols should incorporate strategies to ensure parent involvement and consent as needed, and referral for evaluation when a disability is suspected. Third, researchers should report all information needed to evaluate the effectiveness of the intervention and external validity of the data including success and failure rates for students, any variation of outcomes across participant groups, and context information (who implemented the intervention, what training and materials were needed; Kratochwill & Stoiber, 2000).

Diagnosing LD with RTI

Although RTI holds potential as an assessment-to-intervention model, the implications for diagnosing children as learning disabled are less clear. It could be quite possible that an assessment results in data that are comprehensive, multifaceted, fair, useful and valid for the purposes of improving student learning, but do not result in valid diagnoses of LD. In fact, using RTI data primarily for LD diagnosis is almost indefensible because labeling a child
with a disability due to a lack of adequate response to effective interventions is basing a
diagnosis on prognosis (Burns, 2007), and a valid diagnostic paradigm should be based on
data that lead to treatments with a likely prognosis (Cromwell, Blashfield, & Strauss, 1975).
However, identifying a child as LD with RTI makes a diagnosis from data that lead to
treatments with assumed outcomes, and the failure to achieve those outcomes results in a
diagnosis. This represents somewhat circular thinking and relies on the same high-
inferences for which current diagnostic approaches are criticized (Aaron, 1997; Dean &
Burns, 2002). At the very least this line of thinking suggests an area in need of additional
research.

Previous LD research within RTI focused on reduced prevalence of LD and reduced
disproportionality of minority representation in special education (Burns & Senesac, 2005;
Gravois, & Rosenfield, 2002; VanDerHeyden & Witt, 2005). The relationship between RTI
and LD beyond effects on prevalence requires additional research, because the current
conceptualization of RTI does nothing to inform us about the nature of learning disabilities
(Gerber, 2005). Thus, RTI currently conceptualizes an LD diagnosis as a means rather than an
end that depends on a documented match between special education resources and student
need, and while it involves no need for inferences it provides little diagnostic insight (Burns,
2007). Advocates for RTI would likely point out the long history of criticisms of LD
diagnostic approaches and of the construct of LD in general (Aaron, 1997; Algozzine &
Ysseldyke, 1982, 1983; Coles, 1998; Fletcher et al., 1994, 1998; Simos et al., 2002) as
evidence that a new paradigm would be no worse than the old but could lead to improved
student learning. However, future research replicating previous lines of inquiry that assessed
the skill strength, deficits, and cognitive profiles of children diagnosed as LD using an RTI
diagnosis could provide additional information about learning difficulties and disabilities.

Conclusion and future research

Using RTI data for formal eligibility decisions represents a different data use than
previously validated. For this reason, evaluations of the ways in which RTI-based decisions
meet or fail to meet standards for acceptable assessment practices is desirable. The research
summarized here suggests that RTI-based assessments practices, when carefully crafted and
implemented, have the potential to be multifaceted, comprehensive, fair, valid, and useful.
The criteria used to define responsiveness are yet to be definitively determined, however,
and the resulting rates of referral and special education placement must be examined.
Studies should continue to examine the impact of RTI practices on student outcomes,
whether or not students are found eligible for special education.

Research also is needed to determine whether RTI assessment practices are successfully
translated into psychometrically sound local practices. Treatment fidelity appears to be one
of the greatest threats to validity of RTI assessments. A thorough examination of RTI
treatment fidelity will further our understanding of how often effective interventions are put
in place, for whom these interventions are useful, in what settings these interventions work,
and who is actually carrying out the interventions. This research also can help identify the
staff training and supports required to ensure that RTI is being implemented correctly
(Burns & Ysseldyke, 2005). Finally, the relationship between non-response within RTI and
LD should be fully explored to investigate the relationship between the two.
Education has a long history of fascination with that which is new and research is the key to differentiating fads from true innovations (Ellis, 2005). Although RTI has potential to lead to assessment data that can improve student learning, additional research is needed. Moreover, research and time are both needed to determine if RTI represents a lasting paradigm shift, but given that approximately 5% of the student population in this country is identified as learning disabled (Lerner, 2003), research and time to attempt this potentially useful assessment approach seem warranted.

References


