

NIH Public Access

Author Manuscript

Child Dev. Author manuscript; available in PMC 2011 February 2

Published in final edited form as:

Child Dev. 2009 April; 3(1): 48-50. doi:10.1111/j.1750-8606.2008.00076.x.

RTI models as alternatives to traditional views of learning disabilities: Response to the commentaries

Jack M. Fletcher and

Department of Psychology, University of Houston, Houston TX

Sharon Vaughn

Meadows Center for Preventing Educational Risk, College of Education, University of Texas-Austin, Austin TX

Abstract

Two commentaries in this issue, one by Torgesen and one by Fuchs and Fuchs, are largely supportive of our views of the value of implementing response to intervention (RTI) models in schools. In contrast, Reynolds and Shaywitz's criticisms of RTI represent traditional and often nonempirical views of learning disabilities (LDs). The evidence base on RTI is not empty, and Reynolds and Shaywitz fail to provide research support for their views of either LDs or RTI.

Three commentaries, by Torgesen, Fuchs and Fuchs, and Reynolds and Shaywitz, differ in their approach to our article on response to intervention (RTI). Torgesen provides data on the results of the statewide implementation of the Reading First early reading program in Florida, showing that this version of an RTI model resulted in higher reading achievement and a reduction in the special education eligibility rate. On a smaller scale, many districts that implemented RTI models have reported similar outcomes (Jimerson, Burns, & VanDerHeyden, 2007). Fuchs and Fuchs concur with our depiction of RTI and its evidence base, with one exception: they propose standardized implementation approaches, describing a three-tier model that parallels our depiction of one approach to RTI. Although the standardized model has a strong research base, including our work, we are less interested in promoting a unitary model that includes standardized, individualized, or problem-solving approaches to implementation as long as schools use ongoing student data to inform decisions. Also, many districts will be slow to equate special education with Tier 3, partly because of due process issues. We may not agree with Fuchs, Fuchs, and Torgesen on some issues about RTI, but we do not disagree that these approaches are associated with positive outcomes for students at risk for academic and behavioral problems and that the data generated from multi-tiered interventions can enhance decision making on behalf of students.

Reynolds and Shaywitz express traditional views of learning disabilities (LDs) that we believe are outdated and unsupported by research. Despite their appeal to evidence, their citation list is mostly not peer reviewed. This is not surprising because there is little data supporting their views. Their depiction of the state of the evidence on RTI is not accurate, and these models of service delivery are being implemented for good reasons (Spectrum K12 Solutions/The Council of Administrators on Special Education, 2008), many of which are outlined in our original paper.

Correspondence should be addressed to Jack M. Fletcher, Department of Psychology, University of Houston TMC Annex, 2151 W. Holcombe Blvd., Suite 222, Houston TX 77204-5053. Electronic mail may be sent to: jackfletcher@uh.edu.

As they observe, most of the issues that emerge when RTI data are used for identification also apply to the traditional model they support: "While there are well-known problems associated with current methods, there is little evidence that RTI methods are any better" (p. X). After thirty years of implementation, psychometric methods of identification are still associated with problems that, as we observed, would affect the use of RTI methods *if* identification relied on instructional response data as a sole criterion and with a rigid cut point. In fact, no single method is sufficient, and we proposed potential solutions to psychometric problems affecting identification.

Data are available for two of their areas of concern. They are mostly null and unsupportive of their propositions, but uncited by Reynolds and Shaywitz. First are "bright" students: despite their passionate advocacy for these students, they neglect to indicate who they are and how to identify them. If IQ is the measure of aptitude, a regression-corrected discrepancy in different academic domains *may be* meaningful for students in the upper ranges of IQ, but high IQ and lower achievement is often a regression artifact (Reynolds, 1984–1985). If IQ and achievement correlate at .58, a 1.5 standard error discrepancy would require achievement to be about 32 points lower than IQ at IQ levels of 130 (Fletcher et al., 1994). In this study, less than 5% of the sample identified as LD in reading using multiple psychometric definitions had reading achievement above the 25th percentile. It is impossible to determine whether any student is disabled solely on the basis of his or her IQ level. Finally, as we indicated in our paper, cutting a normal distribution to identify LDs is inherently arbitrary because they represent dimensional disorders.

We are not saying that "bright" students with LD do not exist; IQ per se does not demarcate LD, just as poor instructional response per se does not indicate LD. Thus, our failure to support their traditional notion of LD—"the core concept has been unexpected achievement levels in relation to ability" (p. X)—is not mischievous, but deliberate. Reynolds and Shaywitz say "bright students … share many qualities … with lower functioning, struggling readers" (p. X), but the point of the two meta-analyses is that IQ referencing does not differentiate these two groups on phonological processing even though their IQ levels are about a standard deviation different (Hoskyn & Swanson, 2000; Stuebing et al., 2002). In a meta-analysis of 22 studies, Stuebing et al. (in press) found that IQ accounted for about 1% of the unique variance in response to reading interventions.

These concerns lead to the second issue: what *other criteria* are needed to identify LDs? We argue for instructional response as a central inclusionary criterion; Reynolds and Shaywitz view instructional response as secondary and exclusionary, advocating instead for assessments of cognitive processes. They cite no data supporting their belief that a student's cognitive profile permits "the derivation of different and more effective instruction" (p. X), and we cannot identify such data (Fletcher et al., 2007). We are not saying that LD is not correlated with specific cognitive skills—only that if achievement is measured, their contribution to intervention or identification is not practically significant. It is incumbent on advocates like Reynolds and Shaywitz to provide data that justifies the focus on eligibility instead of intervention in schools and the expense of extensive assessments of IQ and cognitive processes.

An appropriately implemented RTI model will include a comprehensive assessment with measures derived from the hybrid model we described (see Fletcher et al., 2007). It will assess achievement comprehensively, and thus will not miss students "whose phonological skills have been remediated ... and who continue to struggle to read fluently and with comprehension" (p. X). Perhaps the best approach to identifying "bright" children with LD is to examine discrepancies in achievement levels, which may indicate a need for intervention.

We indicated that IDEA 2004 requires a comprehensive evaluation and permits referral of a child at any point in the RTI process. IDEA states that students should not be identified solely on the basis of one criterion, and that the team responsible for determining eligibility can use whatever tests they deem relevant, including IQ tests. However, if there is sufficient concern to warrant intervention, the student should have had appropriate instruction before being identified as having a disability, regardless of IQ level. How else is low achievement unexpected and indicative of disability in the absence of inadequate instructional response, which is necessary, but not sufficient?

We did not suggest that implementing RTI approaches is easy, that adequate personnel exist everywhere, or that implementation will be without considerable challenges. We support RTI approaches because they integrate the best evidence we have about how to effectively provide services for students at risk for or with disabilities involving academic and behavioral problems. When Public Law-94-142 was passed in 1975, we knew little about implementing individualized education plans, nor did we have adequate personnel for developing educational programs and teaching students with disabilities in public schools. However, this precursor to IDEA 2004 was a groundbreaking pronouncement about the value of educating all children in public schools. The evidence supporting RTI approaches provides a framework for service delivery and data-based decision making using the best scientific research available to prevent and remediate academic difficulties and to facilitate identification and treatment of those with disabilities.

Acknowledgments

Supported in part by a grant from the National Institute for Child Health and Human Development, 1 P50 HD052117, Texas Center for Learning Disabilities.

References

- Fletcher, JM.; Lyon, GR.; Fuchs, LS.; Barnes, MA. Learning disabilities: From identification to intervention. New York: Guilford; 2007.
- Fletcher JM, Shaywitz SE, Shankweiler DP, Katz L, Liberman IY, Stuebing KK, et al. Cognitive profiles of reading disability: Comparisons of discrepancy and low achievement definitions. Journal of Educational Psychology. 1994; 85:1–18.
- Hoskyn M, Swanson HL. Cognitive processing of low achievers and children with reading disabilities: A selective meta-analytic review of the published literature. School Psychology Review. 2000; 29(1):102–119.
- Jimerson, SR.; Burns, MK.; VanDerHeyden, AM. Handbook of response to intervention: The science and practice of assessment and intervention. Springfield, IL: Charles E. Springer; 2007.
- Reynolds C. Critical measurement issues in learning disabilities. Journal of Special Education. 1984– 1985; 18:451–476.
- Spectrum K12 Solutions/The Council of Administrators of Special Education. Response to intervention (RTI) adoption survey. Washington, DC: The Council of Administrators of Special Education; 2008.
- Stuebing KK, Barth AE, Molfese PJ, Weiss B, Fletcher JM. IQ is *not* strongly related to response to reading instruction: A meta-analytic interpretation. Exceptional Children. (in press).
- Stuebing KK, Fletcher JM, LeDoux JM, Lyon GR, Shaywitz SE, Shaywitz BA. Validity of IQdiscrepancy classifications of reading disabilities: A meta-analysis. American Educational Research Journal. 2002; 39(2):469–518.