

Ideology and Early Literacy Evidence: A Response to Chapman & Tunmer (2015)

Robert M. Schwartz, Oakland University

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In their most-recent paper, Chapman and Tunmer (2015) continue their ongoing political analysis of Reading Recovery® and the research that provides evidence of the intervention's effectiveness (Chapman & Tunmer, 2011; Nicholson, 2011). They argue that the intervention "should be dropped and replaced by a more-contemporary, research-based, reading intervention approach, together with more effective literacy instruction in children's first year of schooling (p. 11). In this response, I demonstrate how Chapman and Tunmer's perspective on literacy instruction and their ideological and political agendas have biased the research analysis they present. (Unless otherwise noted, all Chapman and Tunmer citations refer to their 2015 paper.)

Similar ideological perspectives on literacy learning and instruction distorted the procedures used to award billions of dollars of funding under Reading First legislation in the United States. The Inspector General's report (2006) found the following example of bias:

A few days before the Department publicly announced the panelists it had chosen to serve, one of the Department-nominated panelists contacted the Reading First Director and shared his strong bias against Reading Recovery and his strategy for responding to any State that planned to include Reading Recovery in its application. The Reading First Director responded: "I really like the way you're viewing/approaching this, and not just because it matches my own approach :-), I swear!" This individual later served as the panel chair for the subpanel that reviewed Wisconsin's State application and in response to the State's plans to use Reading Recovery, he included an 11-page negative review of Reading Recovery in his official comments on the application. (p. 18)

Wisconsin's Reading First application was rejected multiple times until they removed Reading Recovery from the application. A similar political subtext guides Chapman and Tunmer's analysis of Reading Recovery research.

In an era when clinical trials and research evidence are increasingly demanded in support of educational practice, it is not surprising that ideology can distort the interpretation of the available evidence (Allington, 2005; Pearson, 2004). The major focus of Chapman & Tunmer's analysis is on whether former Reading Recovery students will sustain their gains several years after the intervention. As part of the introduction and discussion of this issue, they also question the research supporting the initial effectiveness of the intervention, particularly for the lowest-performing first-grade students. They attribute the problems they see in initial effectiveness and sustained effects to the theoretical underpinnings of the intervention in regard to phonics and phonemic awareness.

These are not new issues. They have been raised previously by these authors and other critics of Reading Recovery (Chapman & Tunmer, 2011; Moats, 2007; Reynolds & Wheldall, 2007). Reading Recovery professionals have responded to these critics in publications and white papers (RRCNA, 2002, 2012; Schwartz, Hobsbaum, Briggs, & Scull, 2009). Because the 2012 RRCNA paper addresses many of the distortions repeated in Chapman and Tunmer, the following sections respond primarily to their new claims.

Research on Reading Recovery Effectiveness

Chapman and Tunmer acknowledge that, "there is some convergent evidence that RR can be effective for some children" (p. 5). This limited recognition of the effectiveness research is qualified in a variety of ways. For example:

Despite the program being adopted for use in other countries (e.g., Australia, Canada, United Kingdom, United States), relatively few well-controlled studies of the effectiveness of RR in any country have been published in peer-reviewed journals. A recent What Works Clearinghouse (WWC) report on the RR program identified 202 studies that investigated RR in relation to the reading skills of at risk beginning readers (U.S.

Department of Education, 2013). Of those studies, only three met the WWC evidence standards involving randomized controlled trials. Although the WWC report concluded that there were some significant effects, the extent of evidence for these effects was described as “small” (U.S. Department of Education, 2013, p. 1). (Chapman & Tunmer, p. 3)

The spin that Chapman and Tunmer place on the research with this statement seems particularly disingenuous. They are certainly aware the WWC (2007) initial analysis of beginning reading programs identified a total of 887 studies which included 153 beginning reading programs. Twenty-seven of these studies met WWC’s evidence standards and another 24 met their standards with reservations. Based on this body of research, the WWC produced reports on 24 beginning reading programs that had one or more studies meeting their evidence standards (with or without reservation). This left 129 programs with no studies that met these standards. The five Reading Recovery studies included in the WWC evidence base (2008) exceeded the number of clinical trials available for other programs and provided substantial support for the causal link between the Reading Recovery intervention and student achievement gains.

When the WWC again reviewed the evidence on Reading Recovery in 2013 only three of the initial five studies were considered to meet their evidence standards. One of the studies removed from the evidence base was the Iversen and Tunmer (1993) study. WWC (2013) indicated that their reason for excluding this study was “because it uses a quasi-experimental design in which the analytic intervention and comparison groups are not shown to be equivalent” (p. 10). This exclusion is unfortunate since it is so rare to have a study conducted by critics of an intervention that so clearly demonstrates the effectiveness of that intervention. Iversen and Tunmer report very small difference among the Reading Recovery and control groups on the pretreatment measures, and these differences favored the control group. Following the intervention period, the Reading Recovery group showed much larger gains than the control group on all measures. This difference is particularly large on the Text Reading Level measure where the effect size is one of the largest in any educational research study, over 6 standard deviations (0.8 standard deviations is generally considered a large effect).

In either the WWC 2008 or 2013 analysis of the research evidence, the size of the effects of the Reading Recovery intervention on measures of alphabetic, fluency, comprehension, and general reading achievement are large relative to other interventions (WWC, 2007). The number of students participating in these studies was, however, small. Chapman and Tunmer focus on this classification of the “extent of evidence” rather than on the large and significant gains shown by students across these studies.

Since Chapman and Tunmer critique the extent of the evidence and cite another peer-reviewed study by May et al. (2015), it is surprising they don’t include the findings of this study in their review of Reading Recovery research. The May et al. study is an independent evaluation from the first 2 years of the 5-year Reading Recovery scale-up grant funded by the U.S. Department of Education’s Institute of Education Sciences under their Investing in Innovation (i3) program. In awarding this grant, the Institute had judged Reading Recovery to have “strong evidence of effectiveness” (Department of Education, <http://www.gpo.gov/fdsys/pkg/FR-2015-06-05/pdf/2015-13673.pdf>). May et al.’s independent evaluation, cited by Chapman & Tunmer, adds a large, randomized clinical trial to the previous evidence of effectiveness.

The WWC has conducted a single study analysis of this research (WWC, 2014). The study met WWC design criteria without reservation — the WWC’s highest rating. Based on their review, WWC concluded that “Reading Recovery had a significant positive impact on the general reading achievement of struggling readers in the first grade. The authors also reported, and the WWC confirmed, statistically significant positive impacts of Reading Recovery in the general reading achievement and reading comprehension domains” (p. 2). Additional evaluations conducted across the 5-year scale-up grant have continued to support the effectiveness of the intervention (May et al., 2015).

Research on Sustained Gains

After attempting to raise doubts about the initial effectiveness of the Reading Recovery intervention, Chapman and Tunmer suggest “there is little empirical evidence to indicate that successful completions in RR result in sustained literacy achievement gains. On the contrary, there is strong evidence to indicate that students who have received RR benefit little from the program” (p. 6).

They seem surprised that there is “no robust, well-designed research to support” the sustained effects of early intervention” (p. 2). They use selected quotes from Clay’s early publications to establish the expectation that students whose literacy learning is accelerated during the Reading Recovery intervention period will never need further literacy support. Contrast this view with Clay’s (2005) perspective:

Children who successfully complete early literacy interventions like Reading Recovery should operate in reading and writing in ways that put them on track for being silent readers with self-extending systems during the next two years at school. With good classroom instruction and moderate personal motivation that should be achievable. (p. 52)

This view situates Reading Recovery within the school’s comprehensive literacy system. Certainly, one would expect children whose literacy learning was accelerated during the participation in a 12 to 20-week early intervention to fare better than similarly at-risk children without this experience. Still, their progress will depend upon subsequent support, both in school and at home. Given the variations in these sources of support, we should expect a somewhat normal distribution of scores around average performance levels for their peers. This distribution should be considerably higher than that shown by children who were similarly low in first grade in schools without effective early intervention. A robust, well-designed study of sustained gains would compare these distributions.

Chapman and Tunmer take a different approach in their analysis of sustained gains. They “present data from the 2011 Progress in International Reading Literacy Study [(PIRLS) Mullis, Martin, Foy, & Drucker, 2012] for children who had received RR 3 years prior to the PIRLS assessments” (p. 3). In addition, they discuss findings on the long-term effectiveness of Reading Recovery based on two recent New Zealand studies (Jesson & Limbrick, 2014; Nicholas & Parkhill, 2014).

There are several major problems with Chapman and Tunmer’s analysis of the PIRLS data. One major problem with their design is the method used to identify the group of students included in the Reading Recovery sample. These children are identified based on a retrospective parent questionnaire completed by parents of 9-year-olds in the PIRLS sample:

Parents or caregivers were asked whether their child had participated in a remedial reading program since starting school. Parents/caregivers who answered Yes to the remedial reading assistance question were asked to indicate the type of remedial program their child had received. Included in the list of options were Reading Recovery, another (unspecified) school-based program, or an out-of-school program. (Chamberlain, 2014, personal communication). (p. 7)

Chapman and Tunmer provide no check on the reliability of this classification system. In my experience, many parents confuse any school-based literacy intervention with Reading Recovery. Even teachers who have had some orientation to Reading Recovery procedures mistakenly feel they are fully trained. Without some indication of the reliability of this classification system, the results of Chapman and Tunmer’s analysis can’t be assumed to reflect the sustained gains of Reading Recovery students.

Another problem in the Chapman and Tunmer analysis is that they make no attempt to separate students who had made accelerated progress during their Reading Recovery intervention from those students whose progress indicated that they needed long-term support. Since Chapman and Tunmer report that 79% of children who received the Reading Recovery intervention in New Zealand were successfully discontinued, their analysis procedure—even if completely reliable—would include 21% of the sample who would be expected to be considerably below average performance levels.

Finally, Chapman and Tunmer make no attempt to evaluate the sustained effect of the Reading Recovery intervention relative to a comparison group of students who were similarly low performing in first grade but who didn’t have access to the Reading Recovery intervention. The only comparison that Chapman and Tunmer present compares the sample of students they identify as having had Reading Recovery (mean = 493) against students whose parents report their child had never received remedial support (mean = 568). They don’t compare their Reading Recovery sample against the group who received some other form of remedial support, nor do they mention that the average level of performance for New Zealand on the 2011 PIRLS was 531, with a standard deviation of 100 (Mullis et al., 2012). This places their Reading Recovery group only

slightly below the national average (- .38) as opposed to the - .94 effect that Chapman and Tunmer report. They also don't report that their Reading Recovery group average exceeds the Intermediate International Benchmark for fourth-grade performance (475). Therefore, while there are many questions that this data does not answer, the information presented by Chapman and Tunmer is as likely to indicate impressive results for the Reading Recovery intervention in producing sustained effects as it is to indicate difficulties.

Chapman and Tunmer discuss findings from two other recent studies of the sustained gains of Reading Recovery students — Jesson & Limbrick (2014) and Nicholas & Parkhill (2014). Both of these studies avoid the first two problems in the Chapman and Tunmer study by using school records to identify and track the progress of children who demonstrated accelerated progress during their Reading Recovery intervention. Neither study tracks progress for a similarly low group of students without access to the Reading Recovery intervention. Instead, they compare the distribution of scores obtained by the Reading Recovery students several years after the intervention to national New Zealand norms on measures of reading achievement. Both studies report a substantial proportion of Reading Recovery students achieving in the average range on their criterion measure, 49% in stanines 4–6 (Nicholas & Parkhill) and 60% at average levels (Jesson & Limbrick). However, both studies indicate that the distribution of student scores has a mean below national norms and is negatively skewed with more former Reading Recovery students falling in stanines 1–3 than in stanines 7–9.

The findings in these studies are what would be expected for a group of students whose literacy progress was accelerated in first grade but who have a number of risk factors in their lives that had contributed to their low initial literacy performance. Still, as Clay (2005) suggests and these studies support, children can maintain average literacy levels with “good classroom instruction and moderate personal motivation” (p. 52). Both studies situate Reading Recovery as part of a comprehensive literacy system. The critical research question is not whether Reading Recovery students maintain their gain, but rather what factors within the system help students maintain their intervention gains over time. Jesson and Limbrick (2014) analyze their results to help identify these factors.

Early Intervention Theory and Practice

In many schools, districts, and educational systems, Reading Recovery provides a response to intervention (RTI) approach to the prevention of reading difficulties and the identification of students needing longer-term literacy support (Clay, 2005; Schwartz, 2005; Vellutino, 2010; Vellutino et al., 1996). Clay describes these as the “two positive outcomes” of early intervention (2005, p. 55). Chapman and Tunmer seem surprised that over “the past decade, 11% to 13% of RR children did not successfully complete the program but, instead, were referred on for specialist help” (p. 5). This is the second positive outcome of an early intervention, RTI approach. Certainly, some of the lowest-performing students, and some “Maori and Pasifika children (those of Pacific Island Polynesian heritage) and children from schools in low socio-economic neighbourhoods” (p. 5) will be among this group, but many of the lowest-performing students from these groups successfully accelerated their learning and maintained their gains over time.

Chapman and Tunmer argue that since the Reading Recovery intervention doesn't prevent reading difficulties for all of the lowest-performing students, the intervention “should be dropped and replaced by a more contemporary, research-based, reading intervention approach, together with more effective literacy instruction in children's first year of schooling” (p. 11). They conclude:

There are serious shortcomings and much-needed improvements in several aspects of RR, including the theoretical underpinnings of the program, the assessment battery which fails to include measures of phonological processing skills, the specific instructional strategies emphasized in the program (e.g., the multiple cues approach to word identification), the manner of program delivery (one-to-one versus instruction in pairs), and the congruence between classroom literacy instruction and the RR program. Fundamental changes in all of these areas would very likely improve the effectiveness of the program, both in terms of outcomes and cost (Church, 2005; Reynolds & Wheldall, 2007; Tunmer & Chapman, 2003, 2004). (p. 10)

The authors' critique of Reading Recovery has a long history, but surprisingly there is little “robust, well-designed research” to support their claims for needed

change. The study by Iversen and Tunmer (1993) that produced such large gains for the Reading Recovery group, relative to low-performing students in schools without the Reading Recovery intervention, also included what the authors described as a “modified Reading Recovery” treatment. This *modified* treatment group was their attempt to show that an increased emphasis on phonics and phonemic awareness would enhance the Reading Recovery intervention. Both the *modified* and *standard* Reading Recovery interventions showed significant and large gains on all measures relative to the control group, and almost identical profiles for the two treatment groups at the end of the intervention period. Iversen and Tunmer included measures of phonemic segmentation, phonemic deletion, and phonological recoding in their outcome measures. At the end of the intervention period, the standard Reading Recovery group scored slightly higher on each of these measures than the modified group.

The similarity in gains by the two treatment groups suggests that these large gains had very little to do with the “modification” introduced by Iversen and Tunmer (1993). One difference that they do report is in the number of lessons required by each group to reach the criteria for discontinuing the intervention. This variable was not a part of the analysis plan described in the study and depended on subjective decision by one of the authors, with no check on reliability. If the modified intervention was in some way more efficient than the standard intervention, it is surprising that the authors haven’t replicated this finding with a fixed intervention period so that the difference among groups could be reflected in reliable and valid measures of literacy learning.

Reading Recovery professionals have, and will continue, to modify the early intervention in response to new research. Chapman and Tunmer’s concerns about the theoretical underpinnings of a highly effective intervention emphasize ideology over science (Allington, 2005). Reading Recovery is neither a whole language nor a traditional phonics-based intervention. Clay’s (2001) theory incorporates a more-complex view of early literacy learning that incorporates direct phonics and phonemic awareness instruction and links that knowledge to monitor word recognition decisions while reading (Doyle, 2013; McGee, Kim, Nelson, & Fried, 2015; Schwartz, 2015; Schwartz & Gallant, 2011). This emphasis on monitoring during the reading of connected text helps many struggling beginners to construct the elaborate set of orthographic

knowledge that Tunmer and Nicholson (2011) call the *cipher*. As noted by Adams in 1990:

The Reading Recovery Program has been methodically designed to establish and secure that whole complex of lower-order skills on which reading so integrally depends. But its goal extends much further. The program is intended to help the children learn to monitor their own reading ... and to develop a strong sense of how to search deliberately and methodically for information in letter sequences, word sequences, or meaning when needed. (p. 421)

The literacy profession would be well served to abandon the debate over whether phonics knowledge is a necessary component of early literacy learning. The science of early literacy needs to focus on change over time in children’s word recognition strategies as children build their phonic and orthographic knowledge and learn to use that knowledge strategically to construct meaning as they read and write increasingly complex texts (Clay, 2005; Doyle, 2013, McGee et al., 2015; Schwartz, 2015).

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