
The Intervention Experiences of High School Struggling Readers: A Review

By Olivia Murphy¹

► ABSTRACT

This article is a review of research on reading interventions for high school struggling readers. Inclusion criteria for this study include intervention implementation on or after 2002; measures of reading performance reported both before and after intervention; and interventions implemented with native English-speaking, general education high school struggling readers. Twenty-six studies met these criteria and were reviewed. Results show that all high school reading interventions reviewed target one or more of the four following aspects of reading instruction: the essential reading skills, teacher instructional strategies, disciplinary literacy, or student engagement-centered approaches, with a majority of interventions addressing comprehension either alone or in conjunction with another aspect. This study also reveals several gaps in both secondary reading interventions and the research that studies them, most notably a lack of social-emotional attention at the intervention level, and a lack of common definitions and theoretical approaches at the research level. The study concludes with proposed next steps for high school reading intervention and design, as well as suggestions for teacher preparation programs.

Keywords: secondary literacy, reading interventions, reading skills, reading performance, high school reading, secondary reading

In 2001, the No Child Left Behind act (NCLB) expanded the federal government's role in education, emphasizing commitments to improving the academic performance of "low performing" students and closing the gaps between white students and their Black and Hispanic peers (No Child Left Behind [NCLB], 2002). NCLB mandated that by 2014 all high school students score "proficient" or higher on a reading/English state exam, with hopes of improving overall literacy and post-secondary readiness. With NCLB came a barrage of inflexible accountability measures, cookie-cutter resources, high-stakes tests, and curriculum changes specifically targeted at "struggling" readers (Cassidy et al., 2016; Gerstl-Pepin & Woodside-Jiron, 2007). An influx of standardized testing became the way to create a consistent data feedback loop to monitor progress and measure accountability, and direct instruction and early interventions were adopted to help boost test scores (Cassidy et al., 2016). To facilitate interventions, literacy coaches became valuable commodities, providing instruction to students and professional

¹ University of Maryland (Email: oamurph@gmail.com)

development to teachers from prepackaged coaching handbooks and nationally disseminated “best practices” reports (Cassidy et al., 2016). Unfortunately, NCLB’s strict accountability policies and testing mandates did not sufficiently account for individual learning needs, and were particularly ineffective for many of the subgroups that they were designed to support (Gerstl-Pepin & Woodside-Jiron, 2007).

By the time the Every Student Succeeds act replaced NCLB in 2015, the 100% proficiency mandates were decidedly unmet and the reading scores for twelfth grade students remained unchanged (McFarland et al., 2017). In 2015, the average National Assessment of Education Progress (NAEP) reading score was 287—exactly the same average score as 2002. Further, a 2% decrease in at-or-above proficient scores happened over the same time frame (NAEP, 2015). Worse still, the reading achievement levels of NCLB’s focus subgroups has remained relatively unchanged and comparatively low over time, demonstrating the fact that equity gaps persist in secondary reading. For example, in 2002, 42% of white 12th grade students scored at or above the “proficient” level in reading, with only 16% and 22% of their Black and Hispanic peers, respectively, doing the same (NAEP, 2002). By 2015, the number of white 12th grade students scoring at or above the “proficient” level had climbed to 46%, with only 17% and 25% of Black and Hispanic students, respectively, doing the same (NAEP, 2015).

As improving students’ reading comprehension continues to be a compelling issue for a number of reasons—including the fact that reading is a cornerstone for most other learning, is connected to education equity, and is a skill required to navigate nearly every aspect of life—two big questions seem to recur in the field: how do we improve student reading achievement overall, and how do we narrow and eventually remove the opportunity gaps between our white and non-white students? Researchers’ exploration of these two questions has largely focused on early literacy development, placing a premium on pre-kindergarten literacy priming and the first four years of school (e.g. Hart & Risley, 1995; Evans et al. 2016). On one hand, this early childhood emphasis makes sense: elementary school is when students are first acquiring reading skills, and research does show that early skill acquisition plays an important role in later student success. On the other hand, however, early childhood emphasis alone is clearly not enough, because almost one third of high school seniors in 2015 still scored at “below basic” reading levels on the NAEP reading test despite living through the NCLB-funded uptick in early literacy initiatives (McFarland et al., 2017).

Overall, there is a clear need to support reading research and strategy development throughout students’ k-12 tenure—especially for non-white subgroups—but a much less clear picture on how to best move forward. I argue that in order to think critically and specifically about how to better address the needs of high school struggling readers, it is important to look at the programs already in place to support these students. This literature review is designed to provide such a look.

► PURPOSE OF CURRENT REVIEW

This review explores two primary questions:

1. What does the current body of literature reveal about the format and foci of reading interventions intended to support struggling high school readers?
2. What shortcomings, if any, exist in the design and implementation of said interventions?

I follow in the footsteps of the few non-elementary best practice syntheses that already exist (e.g. Slavin et al., 2008), and then move a step further by including more recent literature and focusing specifically

at the high school level. The explicit focus on high school was chosen for two reasons. First, though scant, a couple of reviews of secondary literacy reading programs do already exist (Slavin et al., 2008; Harmon et al. 2011). However, these reviews tend to focus on programs designed for all students, and also define “secondary” as 6-12 with a majority of the reviewed literature focusing on middle school students. Second, research in both adolescent development and reading suggests that middle school and high school students differ in ways that impact learning and warrant separate consideration (Benner & Graham, 2009; Cantrell et al., 2010; Shernoff et al., 2003). Socially and emotionally speaking, experiences like being labeled as a “struggling reader” matter more as students mature into the teenage years and become older and more conscious agents of their identity construction. Academically speaking, many students entering high school encounter more extensive tracking, academic ranking, and the pressures of post-secondary plans and graduation requirements for the first time; on average, GPA’s decline in the first two years post-middle school (Benner & Graham, 2009).

► METHODS

Data Collection

A broad electronic and interpersonal search was conducted in order to collect the largest possible number of studies to review. The electronic databases searched include ERIC, JSTOR, EBSCO, Project Muse, SAGE Reference Collection, and Google Scholar. Within these databases, different combinations of the following keywords were searched: high school, secondary, reading, literacy, remediation, reading remediation, literacy remediation, intervention, reading intervention, struggling reader, striving reader, and reading difficulty.

Additionally, current faculty members in the field were consulted from three prominent Research-1 Universities. These faculty members added relevant study suggestions, as well as journals to review. Based on suggestions, all electronic editions of the following journals published since 2002 were searched for relevant literature: the *Reading Research Quarterly*, the *Journal of Reading Psychology*, the *Journal of Educational Psychology*, and *Research in the Teaching of English*. After each database, journal, and interpersonal search, articles were collected and compiled into a large primary list of 84 studies. The abstracts of all studies from that list were then reviewed with the below “criteria for inclusion” in mind, resulting in a final list of 26 applicable studies.

Criteria for Inclusion & Characterization

The criteria for inclusion in this study are loosely adapted from Slavin et al., 2008. All included studies:

1. Evaluate a reading approach implemented with students in grades 9-12.
2. Evaluate a reading approach implemented with native English-speaking, general education students.
3. Evaluate the impact of a reading approach on struggling readers.
4. Include some measurement of reading performance both before and after intervention.
5. Evaluate the impact of a reading approach on non-specialized populations.

Were published in or after 2002 (the implementation year of NCLB)

The final 26 articles are characterized accordingly:

Table 1

Characteristics of Reviewed Studies

Study Sample Size	Grades Receiving Intervention*	How Articles Define a “Struggling” Reader**
<ul style="list-style-type: none"> • 2-34 Students: 7 • 34-100 Students: 5 • >100 Students: 14 	<ul style="list-style-type: none"> • 9th Grade: 16 • 9th-10th Grades: 4 • 9th-12th Grades: 2 	<ul style="list-style-type: none"> • Standardized Test: 15 • Standardized: 8 • Other: 3

*Tally excludes literature reviews and struggling reader profiles, therefore not totaling 26

**“Standardized Tests” include any state or national summative reading assessment; “standardized tasks” include locally assessed individual measures of reading ability.

► LIMITATIONS

The field of literature specifically addressing high school struggling readers is small, resulting in a narrow selection of texts for inclusion in this review. By adding criteria removing ELL-only and specific learning disabilities-only studies the field was narrowed even further. Additionally, literature addressing the social and emotional experiences of secondary struggling readers was largely omitted from this review unless it correlated with experiencing a reading intervention class or program; very few such studies seem to exist. The general failure to simultaneously consider interventions alongside more qualitative reports of secondary student and teacher information is a major limitation of both this study and the current state of the field, and this limitation is addressed more in the discussion section.

► RESULTS

As mentioned, the number of articles meeting the criteria for inclusion in this review is small, and is indicative of the lack of overall research specifically addressing high school struggling readers. Nevertheless, a review of the literature does reveal some themes even among the limited results. All reviewed reading programs were interventions designed to address one of the four following aspects of reading instruction: the essential reading skills (the foundational building blocks of teaching and learning reading); teacher instructional strategies; disciplinary literacy (the combination of other content areas with reading instruction); or student engagement-centered approaches. Many studies evaluated two or three of the four categories simultaneously, which makes sense as these categories naturally overlap during reading instruction.

Approaches examining the essential reading skills and approaches examining instructional strategies understandably overlapped most frequently in the literature, as choosing how to implement a comprehension strategy is often related to pedagogical beliefs in how students best learn to read. The instructional strategies category also frequently overlapped with engagement-centered approaches, as it is again a pedagogical choice to consciously consider and build student engagement in curricula. Disciplinary literacy—or the idea that reading growth is best served by teaching reading skills in conversation with other class content like social studies or science—showed up the least, but frequently enough to warrant a separate category. Commonalities and differences across literature from each category are featured in Table 2, and are discussed in detail below.

Table 2
Intervention Approach(es) Used Per Study

Author(s)	Essential Reading Skills	Instructional Strategies	Disciplinary Literacy	Student-Engagement
Balfanz et al. (2004)				
Bemboom and McMaster (2013)				
Cantrell et al. (2012)				
Cantrell et al. (2016)				
Frankel (2016)				
Frey and Fisher (2014)				
Harris et al. (2011)				
Hawkins et al. (2011)				
Hock et al. (2009)*				
Kemple et al. (2008)				
Lang et al. (2009)				
Learned et al. (2017)				
Lovett et al. (2012)				
Marchand-Martella et al. (2004)				
Paterson and Elliott (2006)				
Penney (2002)				
Reisman (2012)				
Resendez et al. (2015)				
Slavin et al. (2008)**				
Solís et al. (2015)				
Somers et al. (2010)				
Vaughn et al. (2015)				
Wilhelm and Smith (2014)*				
Wilkerson et al (2016)**				
Yurchak (2014)				
Zmatch et al. (2009)				

*Reviews of literature prescribing overarching intervention needs

**Struggling reader profiles addressing intervention needs

The Five Essential Skills for Reading Interventions

Common theories of reading development agree that reading success depends on the acquisition and continued maturity of five essential skills: phonemic awareness, phonemic decoding, vocabulary, fluency, and comprehension (e.g., National Reading Panel, 2000; Fountas & Pinnell, 2006). None of the reading programs qualifying for this review address phonemic awareness or phonemic decoding, as it is generally assumed that all children without specific diagnosed reading disabilities (dyslexia, etc) have mastered these skills by adolescence. Accordingly, all reviewed studies that address the essential reading skills address vocabulary, fluency, and/or comprehension, with comprehension being the most frequently addressed skill.

The only reviewed intervention implemented at the school-wide level was carried out in Talent

Development High Schools—public high schools adopting a reform model specifically designed for high-poverty and high-risk students in large urban areas (Balfanz et al., 2004). “Reading comprehension” is never defined in the study, but was listed as being at the heart of instruction. By the end of the 9th grade year, an average of 35% of all students taking the “catch up” courses across all 4 cities had increased their reading levels by at least one school year. Other scripted comprehension-focused approaches saw similar positive results, but were implemented on a much smaller, one-to-one versus whole school scale. For example, Hawkins et al. (2011) examined the impact of repeated reading and repeated reading with vocabulary previewing between repetitions on reading comprehension. Again, no definition of comprehension is provided by the study, but a hypothesized connection between reading fluency and comprehension served as a foundation for the study’s construction. The benefits of repeated reading on comprehension suggested by these studies are limited by their implementation strategies and give no indication about the effectiveness of such strategies on small group or small classroom-sized groups (the more common configuration) of struggling readers.

Only one study in this review disaggregated reading comprehension growth findings in any way, and the results of doing so are worth considering. Solís et al. (2015) measured performance on three reading tests after 9th grade students received a supplemental reading intervention class for an entire year. This article was one of the few to actually situate the intervention development within a stated framework—the direct and inferential meditation model of reading comprehension—which includes an underlying hypothesis that older students’ understanding of texts requires the interplay of a variety of different skills including background knowledge, reading strategies, the ability to make inferences, and vocabulary strength (Solís et al., 2015). At the end of implementation, overall results demonstrated no statistically significant effects for students in the intervention group, which seems initially disappointing. However, when the study results were filtered into subgroups by high- and low- level decoding skills, students with higher-level decoding skills demonstrated statistically significant gains in comprehension scores (Solís et al., 2015). These findings indicate that the category of “struggling reader” might actually contain more diversity than intervention strategies are currently addressing, and that different levels of struggling reader may be more (or less) responsive to different intervention approaches.

As a whole, the reviewed studies addressing comprehension-based interventions all produced positive results, suggesting that interventions addressing comprehension skills - even if benefits are small - are valuable for secondary struggling reader growth. The findings of a final study, however, shed a different light on the value over time. Somers et al. (2010) evaluated the impact of two reading programs - RAAL and the Xtreme Reading Program - both in the implementation year and in the following academic year. Both programs manifested positive impacts on participants’ GPAs, grades, and performance on state exams in English language arts and math in the implementation year. However, by the time students completed their second year of high school, these benefits disappeared and participants did not demonstrate continued growth in reading scores or reading behaviors when the intervention was removed (Somers et al., 2010).

The short but not sustained benefits found in Somers et al. (2010) raise questions about the long-term impact of any temporary or skill-isolated intervention. Penney (2002) found multiple grades’ worth of grade-level comprehension gains on the Woodcock Reading exam after implementing an intervention that included repeated oral readings and vocabulary drills, but the intervention only lasted one semester and did not include any follow-up or notion of whether or not students achieved grade-level results. In conversation with the two-year Vaughn et al. (2015) findings of positive results that still left students

behind grade level, these articles collectively raise questions about the longevity required of any study to drastically improve reading outcomes for struggling readers.

Instruction-Focused Interventions

Seven of the reviewed studies addressed instructional aspects of teaching struggling high school readers, with all seven concluding that the selection of instructional methods can either make or break the success of a reading intervention strategy. As high school students are in a critical developmental period of identity construction, instructional approaches with struggling readers can either validate or undermine students' identities as students and readers. The ability of teachers to choose instructional and pedagogical strategies that foster validation and efficacy in lieu of resentment and resistance is important.

For example, a teacher evaluated in Learned et al. (2017) established daily purposes for students that connected back to week-long, month-long, and year-long goals and themes. The teacher made instructional transparency a classroom norm, and chose instructional strategies, specifically text annotation, to achieve this goal (Learned et al., 2017). Using a social constructivist framework, the study found that "proficient readers" felt like their perspectives were valued and valuable in the classroom, while "struggling readers" felt the opposite and stated a dislike of their classes and teachers. The more students in the study perceived their teachers as "receptive," the more students were willing to practice skills and participate in class (Learned et al., 2017). Bemboom and McMaster (2013) provide another example of the effectiveness of peer engagement, as their comprehension-focused intervention worked better when implemented in peer mediated groups - an instructional delivery choice - instead of teacher-led contexts.

If having a wide instructional toolkit and being able to adjust instructional choices to meet the unique individual and small-group needs of struggling readers is important, then having educators with the resources and ability to do so is equally important. An investigation of supplemental reading courses in alternative high schools identified barriers to successful instructional implementation including qualified teacher retention and credential struggles (Wilkerson et al., 2016). Additionally, in a study comparing the impact of the Learning Strategies reading intervention curriculum on 6th and 9th grade students, teacher implementation fidelity mattered greatly (Cantrell et al., 2012). When the curriculum was implemented faithfully in 9th grade classrooms, students saw gains in achievement and motivation; when the curriculum was not implemented faithfully those gains disappeared (Cantrell et al., 2016).

A similar finding in Lang et al. (2009) revealed that even when strategies are found to accelerate reading development and narrow the gap between struggling readers and grade-level standards, the instructional conditions that created these gains need to continue to exist or the benefits will disappear. This is seen again in Balfanz et al., 2004, where reading comprehension gains from the exact same intervention were twice as high in the classes taught by the most effective teachers versus those classes taught by newer or less-effective teachers. This indicates that the success of a reading intervention may not lie exclusively in the strength of the intervention materials or process, alone, but may also depend upon a number of outside, less-tangible factors like a teacher's ability to maintain engagement, create positive, reciprocal learning environments, and/or foster safe spaces for learning where students feel that their identities and knowledge is valued.

Disciplinary (Content) Reading

Disciplinary or content reading strategies comprised the least frequently occurring category of intervention strategy reviewed (four studies), and always appeared in conjunction with vocabulary and/

or comprehension skill development from the five essential skills category. The goal of disciplinary reading interventions is to either incorporate information from other content area classes into reading strategies, and/or to teach reading strategies explicitly in these classes in addition to traditional English class.

An intensive reading intervention delivered to 59 ninth graders chose texts covering similar content to what students were learning in their social studies and science classes at the time of implementation, and students with baseline decoding skills saw improvements with this intervention method (Solís et al., 2015). Implementation of the REWARDS Plus program—a multi-step reading intervention for high school students in Texas - also included the explicit instruction of science and social studies vocabulary and text in a prescribed, six-step process (Vaughn et al., 2015). Interestingly, both of these interventions were grounded in frameworks that champion the combination of different skills or components of learning. Solís et al. (2015) developed an intervention influenced by the direct and inferential mediation model of reading comprehension, which suggests that older students' different learning experiences and skills combine to inform reading growth. Vaughn et al. (2015) developed an intervention program model in line with a theory of change that requires first developing long-term goals and then planning backwards and fitting all learning experiences across contents into a plan to meet that goal.

Similarly, Learned et al. (2017) examined students' reading experiences across reading, U.S. History, and Algebra classes, and the document-based-questioning strategy implemented in Reisman (2012) occurred in a history classroom. Again, both studies were grounded in frameworks, only in these examples both frameworks (social constructionist in the former and sociocultural learning theory in the latter) emphasized not only cross-discipline reading skills, but also the incorporation of discussion and other socially-oriented activities to promote reading development through the lens of communication and social identity construction.

Engagement Centered Approaches

Finally, seven studies meeting the inclusion criteria of this review examined student engagement as a critical component to address high school struggling readers' needs. A study of Enhanced Reading and Reading Workshop intervention classes delivered in separate settings found that even the research-based curricula taught in these classes was not enough to counteract the impact of being in the class in the first place (Frankel, 2016). The study centered around two struggling readers, both receiving comparable reading workshop instruction in the same high school. Both teachers stated commitments to sociocultural teaching and learning, and made instructional choices like letting students choose books for independent reading and promoting class discussion. However, one of the two students (both of whom self-identified as capable readers) could not come to terms with being in a class in which he did not feel he belonged and accordingly chose to disengage, while the other student adjusted and chose to engage in the course. These opposite emotional connections to the reading remediation classes eventually determined the failure of the former student and the success of the latter (Frankel, 2016).

Many prescribed reading intervention programs designed to increase reading comprehension such as Read180 (Yurchak, 2014) and LANGUAGE! (Zmatch et al., 2009) proved effective for younger middle school students, but do not see similar returns with high school students. Sometimes, the use of such scripted intervention curricula like the Pearson Literature Curriculum actually do more harm than good and leave intervention recipients worse off than their control group counterparts (Resendez et al., 2015). It is important to ask why. If placement in remedial reading classes is a tangible reminder of the label of deficiency and serves as an affront to identity, then students may understandably choose to disengage with remedial strategies (Frankel, 2016). As found in Learned et al. (2017), there is a

reciprocal relationship between self efficacy and success; “successful” readers feel more accomplished and therefore develop a warm connection with reading which in turn motivates them to participate in class, fueling success which promotes self efficacy and the cycle begins again. Struggling readers, however, may struggle to enter into this positive - feedback cycle, and instead willingly disengage to avoid the emotional toll of feeling deficient.

To prevent willing disengagement, it is important for reading intervention strategies at the high school level to help students develop both self-awareness and positive emotions surrounding reading. One intervention did this by asking students in a remedial reading course who initially reacted with “anger and outrage at being categorized as ‘remedial’” to tutor younger elementary students (Paterson & Elliott, 2006). The results were overwhelmingly positive, and students qualitatively reported higher levels of motivation and attachment to reading as well as quantitatively scored an average of two grades higher on post-tests.

Engagement struggles also happen on less conscious, less direct levels when students do not find value in or a connection to what they are learning. Wilhelm & Smith’s *Reading Don’t Fix No Chevys* (2002) followed the in- and out-of-school literacy habits of a diverse group of 49 young struggling male readers. The text concluded that the way to increase the basic reading skills of these young men was to choose engaging texts and foster authentic learning experiences (Wilhelm & Smith, 2002). Several interventions included strategies such as allowing students to self-select texts that they find interesting, and also encouraging student-generated questioning and discussion (Vaughn et al., 2015; Balfanz et al., 2004; and Frey & Fisher, 2014), and all found at least moderate gains either through anecdotal reports of increased enjoyment and reading comprehension skills (Frey & Fisher, 2014) or through statistically significant gains on standardized posttests of reading comprehension skills (Vaughn et al., 2015 and Balfanz et al., 2004).

As a whole, many of the engagement studies are limited in their ability to both qualify and quantify reading growth - often doing either one or the other but not both - and few addressed engagement issues that may arise when student and teacher identities clash (for example, racial differences between teacher and disengaged student in Learned et al., 2017). That being said, the most powerful anecdotal reports of growth and the only studies to contain any student voice were all found within this category of engagement-centered practices which constitutes an important strength in a body of literature that proved largely devoid of any consideration of student experience.

► DISCUSSION

Commonalities across studies and the resulting categories

The overwhelming majority of reviewed studies that addressed the essential reading skills - 21 of 26 - suggests that targeting these skills is important when working with struggling secondary readers. A popular theory about reading development that dates back to the 1990’s is that children “learn to read” until about third grade, after which time they “read to learn” everything else (Chall, 1996). Recently, this divide between reading to learn and learning to read is finally getting challenged (Goldman et al., 2016), and the results of this review support these findings. Students need continued instruction in developing foundational reading skills, and this continued instruction is even more important for students who continue to struggle into their high school years.

Overall, these studies show that comprehension is an important skill to continue to directly teach struggling readers at the high school level, which is an important note for researchers and teachers alike. However, the comprehension intervention studies collectively have large limitation in that none of them

actually defines “comprehension,” and all use the term broadly resulting in a lack of consistency across the literature. At times, for example, comprehension seems to mean being able to summarize and relate the text to other scenarios and texts (e.g., Balfanz et al., 2014). At other times, comprehension gains are more broadly measured as performance increased on standardized measures (e.g., Vaughn et al., 2015). Further, with only two of 21 studies grounding the creation of their interventions in a stated theory or framework, it is difficult to draw comparisons across studies or even determine how intervention choices were made. One noticeable result is that intervention methods varied greatly in design. For example, though all stated a desire to improve comprehension outcomes, some studies focused on repetition and vocabulary drills (e.g., Penney, 2002; Hawkins et al., 2011) while others used modeled thinking (e.g., Balfanz et al., 2004; Vaughn et al., 2015) and others still implemented summary and retelling techniques (e.g., Cantrell et al., 2016; Bemboom & McMaster, 2013).

Though it is possible that all of these approaches are beneficial to comprehension development, a lack of cohesive theoretical approach makes the studies and their outcomes difficult to compare. As a result, broader conclusions about what comprehension means and the best approaches to address it with older readers are nearly impossible beyond the vague and obvious “comprehension needs to be taught explicitly.” An important next step for the field as a whole is to begin grounding reading skills instruction within the bounds of defined frameworks and definitions in order to come to clearer conclusions about how and why high school struggling readers exist, and what aspects of reading interventions actually help overcome these struggles.

What is a “struggling reader?”

Across the studies in this review, being a “struggling reader” meant anything from being at least one grade level behind, to failing an 8th grade state test, to being up to five years below grade level. For example, one study classified students based on teacher and administrator anecdotal recommendation (Lovett et al., 2012) while another funneled any student scoring below 50% on a state exam into the sample (Paterson & Elliott, 2006).

At first glance, this does not seem to be a problem: a struggling high school reader is reading below the appropriate grade level, and as long as the identifying characteristics are well-defined then there should be no concern. However, all of the definitions of “struggling reader” used to classify students in the reviewed literature are decontextualized, test-based measures, and students do not exist in decontextualized, test-based realities. Multiple studies reviewed identified the fact that “struggling readers” struggle with different aspects of reading, and understanding these unique struggles is important to finding successful instructional techniques (e.g., Marchand-Martella et al., 2004; Wilkerson et al., 2016; Lang et al., 2009). However, none with the exception of Frankel (2016) expand this understanding of individual need outside the realm of skills and into areas of social and emotional needs. The two students highlighted in this study both saw themselves as competent readers, and rebelled against the identity-defining label of “struggling reader” that placement in an intervention class suggested. Unsurprisingly, the intervention strategies employed by the well-meaning instructor proved unsuccessful, because they were not aligned with the contextually-rich experiences of the two students (Frankel, 2016). Additionally, a struggling reader perceived to be below grade level by an adult, versus a student testing four grade levels behind, versus a student one grade level behind may likely have different reading struggles and require different intervention methods.

By the time a student is struggling in high school s(he) has likely already been struggling unsuccessfully for a number of years, which creates a distinct relationship with reading that can be neither ignored nor summed up in a test score. To put it simply, nobody enjoys being bad at something—especially something

that is consistently being utilized as a measure of one's success and academic worth—and the repeated experience of failure takes an emotional toll. By chalking students' reading identities up to numbers on a page and ignoring the delicate context, we seem to be insuring continued failure. Only one study of a high school reading intervention followed up on the continued progress of students after the end of the intervention period, and the results indicated that long-term growth was nonexistent (Somers et al., 2010). Another intervention fostered at least one grade-level's worth of reading growth in about a third of all 9th grade participants, but if participants entered the study more than a grade level behind, then they were still left behind at the end of the study (Balfanz et al., 2004). Perhaps this means that successful secondary interventions require even more time and should last the duration of high school, or perhaps it means that many of our current intervention strategies are quick fixes that do not address the underlying problems. Most likely it means both, but more long term and comprehensive research is needed to know for sure. In the reading preparation for this review over a dozen case studies, interviews, and observations were read, but only one examined the intersection of secondary reading intervention strategies with the lived experiences of students receiving them, which represents a significant gap in the literature.

Where did demographics go?

Following in the tracks of context, a final gap in the literature seems significant. Out of 26 reviewed studies, only Vaughn et al. (2015) discussed findings specifically within the context of race, gender, or class. Almost every study reported the demographics of study participants alongside test scores and criteria for study inclusion, but only one reported impact results demographically. This may mean that demographic trends in results were insignificant, but that hardly seems possible, especially considering the fact that, as mentioned in the opening of this paper, struggling readers are disproportionately minority students (Goldman et al., 2016; NAEP, 2015). A more likely possibility is that looking at reading interventions qualitatively will not just reveal more about the lived experiences of struggling readers, but also help shed new light on why reading gaps exist between white and non-white students. It is necessary to explore the results of reading intervention efforts through the lens of race and ethnicity if we hope to address the glaring inequities inherent in the fact that Black and Hispanic students are achieving reading proficiency at about half the rate of their white peers (NAEP, 2015).

► CONCLUSION

The major implications for future research lie in what is missing in the reviewed literature. More research needs to address the unique challenges faced by struggling high school readers; four years is a short amount of time to remediate something as large as reading ability, but the impact of reading skills on academic success in all content areas as well as continued success beyond the high school years cannot be overstated. High school is the last opportunity many students will have to build and develop critical reading abilities for life and academic success. Knowing more about strategies and interventions that work with the unique skill *and* social-emotional differences of high school students is the only way to figure out how to effectively do so. In order for this future research to be effective, it might consider operating within a self efficacy or sociocultural theoretical framework, considering not only struggling readers' test scores, but also their approaches to and relationships with reading, their history of success and failure with reading, and the types of reading they do and do not view as valuable to their success. Either of these theoretical approaches will also likely include unpacking the differences between subgroups of students. Since we know that struggling readers are disproportionately minority, male, and poor, it is worth exploring whether different reading interventions are more or less effective with these groups, and whether or not the origins of their struggles demand different remedial attention.

This review also generates takeaways for current and future teachers and teacher preparation programs and professional development. First, high school struggling readers have foundational skill gaps - most likely with comprehension, vocabulary, and fluency - that require direct instruction. Many high school English teachers are ill-equipped to provide this instruction, and will require further development, time, and the curricular freedom to do so effectively (Wilkerson et al., 2016; Harmon et al., 2011). It is possible that flexible, well-trained teachers who can recognize and adapt to student needs and individual circumstances are more beneficial than any prescribed intervention could ever be. This means that secondary teacher preparation programs need to spend more time on knowledge of reading instruction, knowledge of how older students learn to read, and strategies for addressing foundational skill gaps. Second, the non-cognitive aspects of academic development are important at all ages, but especially so in high school, where students with a history of “failure” may struggle with self-efficacy, motivation, and engagement. These non-cognitive factors will impact the effectiveness of any skills-based approach, and must necessarily factor into any high-school level intervention aiming to impact the academic reading ability of struggling students.

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