Defining Dyslexia: Knowledge and Perceptions of Early Childhood Educators

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Defining Dyslexia

State and federal education codes, along with professional organizations such as the International Dyslexia Association and the Learning Disabilities Association, have offered differing definitions of dyslexia. Most generally accepted definitions include a statement of neurobiological origin with characteristics that include difficulties with letter-sound correspondence, accurate and fluent word recognition, poor spelling and limited decoding abilities. As a result of labored reading efforts, students with dyslexia often struggle with comprehension (Lyon, Shaywitz, & Shaywitz, 2003; Ness & Southall, 2010).

The Importance of Dyslexia Training for Early Childhood Educators

According to the International Dyslexia Association (IDA), an estimated 15% to 20% of the general population experiences one or more symptoms of dyslexia or reading problems in the first three years of school (IDA, 2007). Unfortunately, research suggests that educators struggle to improve student research achievement. Ness and Southall (2010) reported that frequently, elementary teachers have gaps in their knowledge of language structure, linguistics, and the technical knowledge required to teach fundamental reading. Participants in their research seemed to have an understanding of dyslexia as a reading disorder that complicates literacy development; however, they demonstrated a lack of awareness linking deficits in the phonological components of language (Ness & Southall, 2010).

Early and intensive intervention is the best prevention of later reading failure (Fedora, 2014). Dyslexia, while potentially disabling, does not need to disable a child (Kauffman, McGee, & Brigham, 2009), but guidance and informed early identification and remediation is necessary (Fedora, 2014; National Institute of Child Health and Human Development, 2000).

Purpose of the Present Study

Although previous studies revealed teacher knowledge of effective instruction elusive and underscored the importance of early identification, rural educators have been routinely neglected from these studies (Williams, 2003). The paucity of research targeting rural education led the present authors to inquire about this neglected aspect of dyslexia knowledge. The present pilot investigation, therefore, aimed to gain insight into the knowledge and perceptions of dyslexia among practicing teachers in rural school districts. The following research questions were addressed (a) How do rural early childhood educators define dyslexia?, and (b) How do rural early childhood educators determine if a child is at risk for dyslexia?

Method

A brief cross-sectional survey was collaboratively designed by the first and second author to assess the knowledge and perceptions of early childhood teachers serving kindergarten, first, and second grade students in rural Northeast Texas schools. The survey was reviewed by an expert panel, including general and special education faculty, a dyslexia specialist, and general education teachers knowledgeable of typical reading development, specific learning disabilities, and/or dyslexia. The survey was then refined to ensure that questions were appropriate to gain insight into teacher knowledge and perceptions.

The survey contained four demographic questions and eight open ended questions related to (a) students experiencing reading difficulty, (b) definition of dyslexia, (c) traits of students with dyslexia, (d) curriculum, and (e) instructional methods.

Sampling Procedure and Response Rate

After obtaining Internal Review Board approval and participant consent, a hard copy of the survey was provided to kindergarten, first, and second grade teachers prior to a regional staff development session. Participants included 71 early childhood teachers responsible for literacy instruction in rural Northeast Texas public schools who volunteered to attend trainings on dyslexia. Seventy partici-
participants were female and one participant was male. The mean number of years teaching was 6 years. Participants were asked to honestly answer questions and were provided with a half hour to complete the survey. The survey response rate was 100%, with only two participants electing not to answer questions related to curriculum.

Data Analysis
Basic qualitative methods were used to analyze open-ended survey questions (Merriam, 2014). First, data were reviewed using an open coding procedure that involved reviewing responses for general patterns in the data (Corbin & Strauss, 2008). Next, axial coding was completed to make connections between participants and develop subcategories within the data (Corbin & Strauss, 2009; Maxwell, 2012). Then, selective coding procedures were employed to connect categories (Charmaz, 2014; Glaser & Strauss, 2009). Finally, researchers developed an overarching theory about the dataset and compared the theory to prominent definitions of dyslexia.

Results
The researchers developed three overarching themes (a) varying definitions of dyslexia, (b) difficulty determining students at-risk for dyslexia, and (c) training needs. Each of the themes and representative quotes are summarized below.

Definitions of Dyslexia
Most teachers were unable to provide a definition that was consistent with those adopted by the Texas Education Code, International Dyslexia Association, Learning Disabilities Association, or the Scottish Rite Hospital. Interestingly, almost half of the respondents noted that dyslexia is a learning disability or disorder somewhat aligning with the federal Individuals with Disabilities Education Improvement Act of 2004. Some respondents noted that students who have dyslexia experience difficulty with spelling, writing, and reading while seven respondents wrote, “I don’t know.” Some prominent quotes follow.

I am not a dyslexia teacher. So, I think a student having trouble with letters, sounds, or reading has dyslexia. Dyslexia is a learning disability that causes a student to learn differently.

Dyslexia is a broad "umbrella" term that has been applied to a variety of reading difficulties. Dyslexic students are often bright but they process information differently than the traditional classroom typically provides instruction. It often includes "backwards" writing and inversion of letters or numbers, [and] difficulties with handwriting.

Dyslexia is a learning disorder that affects reading. Students have problems with writing and need to see a reading specialist.

Determining Students At-Risk for Dyslexia
Teachers reported that many students have trouble with reading and need interventions. Further, many teachers noted that they “know who is having difficulty” but feel ill-equipped to provide interventions or support. Areas of concern included reading, writing, and general low performance. None of the participants identified research-based practices related to assessment, evidenced-based interventions, or collaborating with trained personnel. Some teachers noted that the dyslexia specialist, and/or special education teacher, is responsible for supporting students who have reading difficulties. Some pertinent quotes are shared below.

I love my job but we need more support and information, testing, people (speech therapist, dyslexia people). Not everything is [a] behavior problem or learning disability. Not everything is about a "language barrier". As a school we have dyslexics, special education, and slow learning students just no way of determining who needs what.

I need HELP! I teach first grade and our children aren't even tested until the end of the 1st grade and to get services until 2nd grade.

I don't know. Help!

Need for Additional Training
Many teachers noted that they were somewhat uncomfortable identifying and working with students at-risk for dyslexia. The majority of teachers reported that they need help and support to meet student needs. While districts provided some standard materials, teachers noted that they often attempt to make their own materials or adapt district materials. Teachers reported using small group instruction and hands-on activities, but noted that the strategies were largely ineffective with students who have trouble reading. The most common theme was a desire to know more and for students to receive the services and supports needed. A few representative quotes are below.

I am somewhat comfortable teaching reading but could use
more training in learning to identify these students and knowing what materials and/or strategies are most beneficial.

I would like more training on how to give my struggling students a better phonics foundation.

I would be comfortable with dyslexic students with the appropriate training and support from others.

No, I am not comfortable. I am worried. I feel like I still have a lot to learn. I would like to learn more strategies to better help these students.

Post-Survey Intervention
Following the survey, training sessions were conducted by Texas A&M University-Commerce. All teachers attended at least one training session. The sessions emphasized practical, experiential, hands-on activities. The importance of simulation activities cannot be overstressed as these type activities proved to not only contribute toward recognition of dyslexia characteristics, but also increase teacher awareness and comfort level. Several teachers reported on how valuable they found the simulations and reported increased empathy for students who “live with it all the time.” While many teachers would be reluctant to give up a series of Saturdays for professional development, our teachers continually “asked for more,” particularly if the training included relevant and practical ideas usable to their individual situations.

Recommendations and Implications for Practice
As the participants in the study reported feeling unprepared to meet the instructional needs of their students with dyslexia, they would benefit from additional training to better serve those at risk for experiencing reading difficulties. Examples of training needs are outlined.

Definitions of Dyslexia
Findings indicate that participants possess misunderstandings regarding the definition of dyslexia and reinforce the need for additional education. It is critical that teachers learn to circumvent lack of clarity that results from having multiple definitions of the condition (Tillotson, 2011). If teachers fail to understand the complexities of dyslexia, their ability to provide effective early intervention is compromised. Like previous research, many participants reported that they did not feel knowledgeable in identifying dyslexia or emergent literacy problems. The state handbook on dyslexia, should provide initial support for increased teacher understanding (Texas Education Agency, 2014). Nonetheless, support for early childhood teachers’ ability to identify issues with emergent literacy, including dyslexia, and to understand how nuances of the various definitions guide intervention choices should be emphasized.

Determining Students At-Risk for Dyslexia
As a teacher, when you say to yourself “This kid can’t read,” not being able to read can “mean a range of things” (Beers, 2003, p. 24). Our participants appeared caring and concerned. Yet, many reported that they knew they had children that were behind in reading but were unable to articulate how to determine “what the problem was.” Without a solid understanding of characteristics and descriptors of dyslexia, teachers are challenged when they are called upon to differentiate between emergent literacy issues and typical child differential development. Assessment must be based on the theoretical and scientific underpinnings of literacy (Brady & Moats, 1997) coupled with age-appropriate curriculum-based assessment focused on phonemic awareness, phonics, fluency, vocabulary, and comprehension (National Reading Panel, 2000).

Therefore, it is recommended that efforts be focused on enabling underserved rural early childhood educators to better identify children at risk. Many teachers stated their district policy prevented the identification of children with dyslexia in early grades. They felt these policies precluded their efforts to intervene. Resources should be available to these early grade teachers to support emergent literacy, whatever the child’s age or label.

Evidence-Based Practices
Teachers need information on the application of evidence-based interventions to address the needs of individual students. Only with knowledge of empirically-validated practices, can teachers provide effective intervention. Participants exhibited a lack of knowledge of generally accepted multisensory teaching strategies proven successful with young students with dyslexia. It was concerning that participants reverted to making their own materials or adapting instructional materials without understanding appropriate uses and strategies for students with dyslexia.

Professional development efforts on evidence-based practices can be
broadened to include information on electronic resources. Fortunately, the availability of devices such as tablet computers can bring resources to the fingertips of both urban and rural teachers, although information on how to select resources remains elusive. Additionally, focus should include how to infuse technology use into an instructional program balanced with face-to-face instructional efforts.

**Progress Monitoring**

Using a frequent progress monitoring approach to measure progress on specific areas of reading development is crucial. Teachers in our study reported some background in progress monitoring, but demonstrated a lack of precision in making data-based decisions.

**Collaboration**

Like previous research findings, our participants reported a lack of collaboration with trained personnel. Ness and Southall (2010) found participants in their study would first consult a close friend or family member before consulting a colleague, listing their last line of support as a textbook or online resource (Ness & Southall, 2010). In rural school settings, teachers may have fewer trained peers or reading specialists to lean on. Training on collaboration, multi-district connections, and suggestions for on-line support (e.g., organizational websites, blogs, or tele-consultation) can be used to support their efforts.

**Conclusion**

Results indicate that in-service teachers continue to have training needs; therefore, administrators must proactively seek out multiple forms of training and resources. Resources may include professional development, videos, and professional conferences (Tillotson, 2011).

Both new and veteran teachers need guidance on how to meet the challenges posed by students in today’s diverse classrooms. Further investigation is necessary to determine if the needs we found would generalize to all rural early childhood educators. Nonetheless, it is the ethical responsibility of each teacher to have the knowledge and skills to act in the best interest of each student, including students with dyslexia.

References


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