

Teaching Children With Hyperlexia

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With the expansion of the inclusion movement and the government's focus on "leaving no child behind," educators have begun to identify a group of children who have difficulty learning but do not fit into more commonly understood categories of disability. One little-known category of exceptionality is known as hyperlexia. For teachers it may be a quandary for program development as they confront children who exhibit a group of characteristics that seem to conflict with each other. Thus, the teacher may note "characteristics of precocious reading development and disordered language acquisition, with concomitant social and behavioral deficits" (Kupperman, Bligh, & Barouski, n.d., p. 1). According to Charlotte Miller (1999):

Hyperlexic children are intelligent, often highly-gifted individuals. They have an intense curiosity and interest in learning. Older hyperlexic children may often be highly verbal and obviously academically gifted. These gifts at times may be so obvious that little attention is paid to the language difficulties of hyperlexia, or to the very nature of the hyperlexic learning style. Only through an understanding of these language difficulties, and the visual and gestalt processing style of these children, can we help them to maximize their potential.

Because of these characteristics, the child may be misidentified. According to several researchers, educators have given such children diagnoses of Asperger's syndrome, pervasive devel-

opmental disorder, simple language delay, hyperactivity, hypersensitivity, attention deficit disorder, attention deficit with hyperactivity disorder, emotional disorders, hearing impairment, giftedness, or even mental retardation (American Hyperlexia Association, 1999; Cohen, 2002; Ray, 1999; Richman, 1997). In fact, Ray stated that educators should consider hyperlexia as a type of autism, because the two groups of children share similar characteristics. Thus, teachers may hear parents say:

My child is hyperlexic, but the teacher says he's autistic, the doctor says he's Pervasive Developmental Disorder—Not Otherwise Specified, and his grandmother thinks he's gifted! Which is right? (Bligh, 1995, p. 1)

The question of which diagnosis is correct is at the heart of the issue, and parents and classroom teachers continue to wonder. As a result of misdiagnosis, school teams may develop inappropriate educational and behavioral plans.

In this article, we present a brief history of the syndrome known as hyperlexia, provide a definition of this syndrome with supporting characteristics, and offer methods for providing educational programs with positive supports for children with hyperlexia.

History and Definition of the Term Hyperlexia

The first mention of the term hyperlexia was in 1967 when Silberberg and Silberberg used it to identify a developmental disability characterized by superior word recognition and decoding skills accompanied by delayed development of cognitive and language abilities

and poor understanding and comprehension of the written word. Silberberg and Silberberg (1968-69) provided four case studies of children, ranging in age

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from 3 to 8 years, as illustrations of this developmental disability. For example, one child in their study was in third grade but "was able to recognize words at the eighth-grade level, due to what appeared to be an excellent visual approach to word analysis" (p. 6). The criterion used in their studies for children to be designated as having hyperlexia was that "their reading score is one year above expected level in the first three grades and 1.5 years above expected word recognition level in the fourth, fifth, and sixth grades" (p. 4). During the 1970s and 1980s a number of researchers continued to work with children who "fit" within this category (Goldberg, 1987; Healy, 1982; Hirsch, 1971; Huttenlocher & Huttenlocher, 1973; Kistner, Robbins, & Haskett, 1988; Mehegan & Dreifus, 1972; Silberberg &

Silberberg, 1971). Despite these two decades of research, there is still a general lack of knowledge concerning this disorder and a continuing question of how to clearly define the syndrome (Richman, n.d.).

The term hyperlexia is “not a medical diagnosis” (Bligh, 1995, p. 2). Indeed, the American Hyperlexia Association (AHA) provides no precise definition of the term nor is it listed as an identified category in the Individuals with Disabilities Education Act (IDEA). In place of a definition, AHA requires that three characteristics (precocious reading ability, significant difficulties in understanding and using spoken language, and problems with social skills) be present for a child to be identified as having hyperlexia (AHA, 1999). Thus, there is no clear definition available for diagnosing children who may fit the profile for hyperlexia. Therefore, educators must use the three characteristics to identify the child as having hyperlexia and develop an appropriate educational program, including positive supports.

Reading Ability

The first characteristic that parents and teachers note is most likely related to the student’s precocious ability in the area of reading. Parents often report these children usually begin to read spontaneously between 18 and 24 months of age. Despite the commonality of early reading, the children exhibit differences in the method they use in learning to read, ranging from automatic decoding or sight reading to reading single words and even to reading sentences. But most children with hyperlexia read before the age of 5 and often read before truly being able to use oral language (Kupperman, Bligh, & Barouski, 1995).

Sparks (1995) described two case studies that give a clear example of this characteristic of hyperlexia. Case 1, DZ, was a 9-year-old boy in third grade who scored on intelligence tests in the mild retardation range. His mother reported, however, that he taught himself to read by the time he was 2 years old and could read books by his third birthday. Test results supported his advanced ability to read words but indicated that

he also had impaired comprehension of the material he was reading. A second case, RL, also taught himself to read by the age of 2 or 3 and was a constant reader after that. RL, just like DZ, had difficulty with comprehension of the material that he was reading.

Despite their ability to read, children with hyperlexia learn isolated pieces of information by rote and have difficulty organizing or using the information in context. According to Aram (1997), children who are hyperlexic “decode with ease yet with only limited reference to meaning” (p. 1). The unifying characteristic of hyperlexia is that all the children are precocious and self-taught readers who have a fascination with letters and reading but have poor comprehension of the written word (Miller, 1999).

Oral Language Usage

Children with hyperlexia appear to learn oral or spoken language in similar ways, but use language in ways that differ from children without the condition. For example, most children with hyperlexia spoke their first words during the second year of life, but about half of these children lost their first words between the ages of 18 and 24 months and had to relearn them later. Early language learning is often echolalic and appears to be learned in chunks, whole phrases, or conversations instead of as individual words. Good auditory memory for repetitive scripts is apparent because these children have an ability to learn songs and jingles by rote. Along with this, there are marked abnormalities in the form of speech, including the use of repetitive speech and an inability to use pragmatic speech (initiation and sustaining of conversational speech; Kupperman et al., 1995). The language abilities of these children often follow a pattern similar to that of children with high-functioning autism.

The two children, DZ and RL, in Sparks’ (1995) case studies both exhibited extensive problems with the understanding and use of oral and spoken language. For example, DZ developed language at a normal rate but had fluency problems described by his mother as “splattered talking” and used inap-

propriate oral communication (e.g., he would insert remarks that were irrelevant or unrelated to the conversation). DZ’s speech also had irregularities in intonation patterns, and he spoke at an abnormal rate. RL also developed language at the average rate but his rate of speaking was abnormally fast. He also exhibited inappropriate oral communication and irregularities in prosody, that is, in the intonation of his spoken language. As a result, for both of these children, understanding oral and written language was difficult.

Social Skills and Behavior

According to Kupperman et al. (1995), most children with hyperlexia exhibit behavior that may interfere with social development and subsequent educational success. For example, many children with hyperlexia exhibit noncompliant behavior and ritualistic or self-stimulatory behavior. They also exhibit an extreme need for sameness and thus have difficulty with transitions. General anxiety, specific fears, sensitivity to loud noises, and tantrum behavior may also be present. They also often have difficulty working in groups, socializing with peers, and developing friendships with peers. Kupperman et al. (1995) suggested that these problems in social relatedness and behavior may be related to the deficits apparent in the child’s ability to comprehend language.



In one case study, the child taught himself to read by the time he was 2 years old but in later years had impaired comprehension of the material he was reading.



The children DZ and RL (Sparks, 1995) also were reported to have significant problems in the social/behavioral area. For example, DZ was able to make

materials instead of a reliance on verbal directions and modeling of the behavior of others.

Final Thoughts

Children with hyperlexia bring to the classroom a complex set of diverse strengths and needs that classroom teachers may be unprepared to address. Without an understanding of hyperlexia, classroom teachers may focus on the exceptional strength the child presents in reading and have expectations of the child that are not feasible given their problems in language comprehension and usage. Therefore, teachers should expand their repertoire of appropriate educational programs with positive supports. Silberberg and Silberberg summed up educators' concern for children with hyperlexia:

The potentiality of later stress is expected to take the form of anxiety provoked by unrealistic assessment of their abilities and the high level of demands placed on them by teachers and parents. It would seem that merely making teachers aware of the situation and its implications might reduce the stress put on these children and be beneficial to the educative process. (1968-69, p. 7)

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