

Conference Paper

# Coping with Learning Disability in a Dyslexic Child in Terms of an Instructional Model

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## Abstract

The children with dyslexia might have difficulty in reading and writing, with most normal children being able to read and write at the age of around 5 to 6 years. The movie *Like Stars on Earth* depicts the story of a boy named Ishaan, who suffers from dyslexia, and how his teacher assists him in terms of the learning process. This article aims to analyze and elaborate the types of instructional model applied by Mr. Nikumbh, Ishaan's teacher, who gives a specific different treatment to him with a view to improving his reading and writing ability.

**Keywords:** dyslexia, multisensory teaching, Orton-Gillingham approach

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## 1. Introduction

Quite a lot of well-known and successful people, such as Albert Einstein, Leonardo da Vinci, Thomas Alva Edison, Walt Disney, Agatha Christie, George Washington, John F. Kennedy, John Lennon, and Lee Kuan Yew, suffer from dyslexia, which is one of the types of learning disabilities, along with dysgraphia, autism, dyscalculia, auditory processing disorders, and attention-deficit hyperactivity disorder. Kutscher said that learning disabilities could be lifelong conditions that, in some cases, affect a person's life in terms of school or work, daily routines, family life, and sometimes even friendships [1]. That's why it is imperative to identify children who suffer from dyslexia, as early intervention is highly desirable.

Fletcher states that the distinction between dyslexia and other reading disabilities is that in dyslexics their difficulty tends to be with decoding single words, whereas those with a general reading difficulty have fluency and/or comprehension problems, but not with single words. The emphasis on single words is based on dyslexics being unable to cope well without continuous text and semantic and syntactic knowledge to help them decode words [2]. Additionally, based on Lawrence, although dyslexia

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is legally recognized as a “disability,” it is not a “disease” nor can it be “cured” [3]. In fact, some researchers say it is a gift because most dyslexic people have greater creativity and intelligence than normal people. Therefore, it is a lifetime challenge for those who suffer from dyslexia. Learning how to minimize the effect and make the most of its positive impacts is essential. If they can overcome and control it, they will be successful people. As explained by Davis, “Before a dyslexic person can fully realize and appreciate the positive side of dyslexia, the negative side should be addressed [4]. That doesn’t mean the positive side will not surface until the problems are solved. The gift is always there, even if it isn’t recognized for what it is. In fact, many adult dyslexics use the positive side of dyslexia in their life work without realizing it. They just think they have a *knack* for doing something, without realizing their special talent comes from the same mental functions that prevent them from being able to read, write or spell very well.”

Children with learning disabilities process information differently, which makes it difficult for them to improve compared with other children at the same age. They need extra help in order to be able to catch up well. As stated by Begum, learning disabilities are problems that affect the brain’s ability to receive, process, analyze, or store information [5]. This is also the case with dyslexic children, who learn differently. They need another learning system that is appropriate for their learning needs. A systematic integrated approach covering all five senses and a one-on-one teacher-student instructional model are required for children to fully overcome their dyslexia barriers.

The story of *Like Stars on Earth* is about an eight-year-old boy named Ishaan Awasthi who at first is a joyful creative little boy. He can make a creative painting with a beautiful combination of color and concept. Nevertheless, his reading and writing difficulty, better known as dyslexia, has led him into depression and makes him become a class clown due to his mispronunciation. Fortunately, a teacher named Ram Shankar Nikumbh cares about him and recognizes his mistakes as symptoms of dyslexia. Finally, with his support, Ishaan manages to overcome his reading problem as well as his depression. At the end, Mr. Nikumbh’s encouragement helps Ishaan to find his true talent, which is watercolor painting. The movie undoubtedly describes the symptoms, the emotional feelings that Ishaan has, and the learning approach or instructional teaching model Mr. Nikumbh uses to help Ishaan to overcome his dyslexic problems. However, the main focus of the research is only the instructional teaching model adopted by the teacher, i.e. the Orton-Gillingham approach, which uses a systematic multisensory approach to teach students basic reading, spelling,

and writing. That's why the objective of this research is to elaborate and analyze an appropriate instructional model for dyslexics.

## 2. Methods

This is a descriptive qualitative research, which consists of a method of collecting data and analyzing data regarding the existing social phenomenon. The researcher as the primary instrument collected and analyzed the data by employing a content analysis method on the instructional model of teaching applied to overcome the problems regarding the dyslexic character from the movie. The unit of analysis is Ishaan, a dyslexic child, and Ishaan's teacher, Mr. Nikumbh. Both of them are cast as the main characters that dominate all the scenes and dialogues. The main data sources used in this research are the video, scenes, and the transcript of the movie. To obtain the findings and discussions, the steps of sorting, categorizing, coding, interpreting, and drawing inferences were employed to analyze the data.

## 3. Results

### 3.1. Instructional model

To help Ishaan learn to read, Mr. Nikumbh uses four instructional models:

#### 3.1.1. Multisensory teaching

One of the characteristics of the Orton-Gillingham (O-G) approach is the use of multisensory teaching. Mr. Nikumbh also applies multisensory teaching to help Ishaan learn to read as he teaches Ishaan by using more than one sense. As can be seen in the scenes from the movie, to reinforce the sounds of vowels, for example the letter "A," Mr. Nikumbh said the vowel sound, in this case "A," while writing the letter "A" in the sand and asked Ishaan to repeat what he had done. After that, he wrote the letter on Ishaan's arm and asked him to guess what letter he had written. To reinforce the consonants, Mr. Nikumbh asked Ishaan to write the letters using colorful paint and shape the letters using modeling clay, while to reinforce counting numbers, Mr. Nikumbh asked Ishaan to use body movements by moving up and down the stairs. In this way, Ishaan used his sight, his hearing, his body movement, and the sense of touch to enhance his understanding.

### 3.1.2. Phonic based

Mr. Nikumbh also provides a lesson that focuses on a phonic-based approach in terms of how letters are linked to sounds and how to apply this knowledge in reading.

For example, he wrote the words "hat," "tap," and "mat" and asked Ishaan to pronounce these words. Then he added an "e" ending to each word and again asked Ishaan to pronounce the words. This way he teaches Ishaan that each letter represents a different speech sound.

### 3.1.3. Sequential

Mr. Nikumbh teaches Ishaan sequentially from a simple lesson to a complex lesson and moves from one step to the next as Ishaan masters each level of language skills. For example, he taught Ishaan by starting with vowels and moving on to consonants, then on to words, and then sentences. He also asked Ishaan to write the number 8 first as a bigger shape and then as a smaller shape because it is easier to write in a bigger form than in a smaller form. Sequential means that concepts are taught in a specifically designed order, beginning with the easiest and most basic, and moving on to more difficult material.

### 3.1.4. Structured, systematic, and cumulative

Mr. Nikumbh presents information in a structured way that indicates the relationship between the material taught and past material taught. He also teaches Ishaan systematically by using integrative practices that combine listening, reading, spelling, and writing altogether. He started by asking Ishaan to write as he dictated a sentence, then he made sure that Ishaan wrote the spelling correctly, and afterwards he asked Ishaan to listen to a recorder as he read and repeated the sentences by reading aloud. He also gave a cumulative lesson by teaching letter by letter, moving on to word by word, and then gradually to long sentences using the words that had been taught.

## 3.2. Discussion

According to Payne and Turner, dyslexic children are defined as: "Children who have difficulties in reading, writing, spelling or manipulating number, which are not typical of their general level of performance [6]. They may gain some skills in some subjects

quickly and demonstrate a high level of ability orally, yet may encounter sustained difficulty in gaining literacy or numeracy skills. Such children can become severely frustrated and may also have emotional and/or behavioral difficulties." Since they have difficulty in learning, an appropriate and systematic approach must be adopted to overcome their disability. One of the approaches used by many people is that of Orton-Gillingham (OG) as the foundational and seminal contribution of Samuel T. Orton and Anna Gillingham. As early as the 1930s they provided the foundation for student instruction and teacher training in what became known as the Orton-Gillingham approach. One of the research findings by Rose and Zirkel reveals the results of a systematic case analysis of all published Orton-Gillingham decisions from the original passage of the Individuals with Disabilities Education Act (IDEA) through 2005 [7]. The results indicate that in the past 30 years, hearing/review officers and courts reviewed 64 Orton-Gillingham cases, with 77% occurring within the last 10 years. Unlike autism methodology cases, districts have won an overwhelming majority (75%). Although inconclusive, the addition of the terms "peer-reviewed research" and "scientifically based research" in the 2004 reauthorization of IDEA may benefit parents in Orton-Gillingham methodology disputes, thereby leading to increased litigation. This article concludes with recommendations for reversing the upward trend in the number of Orton-Gillingham reading methodology disputes.

There are dozens of different reading methods that incorporate the basic principles of the Orton-Gillingham approach. Each method has different specific techniques and manners of presentation, but all are characterized by being: 1) multisensory; 2) phonic based; 3) sequential; and 4) structured, systematic, and cumulative. This analysis examines the teaching approach that Mr. Nikumbh uses to help Ishaan learn to read. The researcher also found out that this method had been used at Pantara elementary school in South Jakarta to accommodate dyslexic students, and they called it a multisensory approach instead of the OG approach [8]. The instructional model of teaching adopted by Mr. Nikumbh to help Ishaan is not directly mentioned in the movie. However, it is clearly shown how Mr. Nikumbh involves all Ishaan's senses, including sight, hearing, touch, and body movement, to teach Ishaan.

From the above findings, it can be seen that Mr. Nikumbh uses "A" as the most common vowel in a multisensory method. As stated by Marshall, with the Orton-Gillingham approach, the teacher begins by presenting the most common consonants and vowels, one or two at a time [9]. Each letter is taught using multisensory methods, so that the child links how the letter looks with how it sounds and how it feels to form the letter. Some tutors have the child trace the letter in sand, write it in the air using

large motions, or run their finger over fine sandpaper or textured carpet. Once a child has learned individual letters, the teacher moves on to consonant blends and letter combinations. Advanced students will study the rules of English language, syllable patterns, and how to use roots, prefixes, and suffixes to study words. Multisensory teaching is instruction that involves interaction between what the student is seeing, hearing, and feeling in forming speech and writing. Getting the student to listen, speak, read, and write reinforces language elements. It uses all the learning pathways: seeing, hearing, feeling, and awareness of motion, brought together by the thinking brain. The instructor engages in multisensory teaching to convey curricular content in the most understandable way to the student. The teacher also models how the student, by using these multiple pathways, can engage in multisensory learning that results in greater ease and success in learning. Gillingham and Stillman published the first teaching method devised specifically to help children with reading difficulties, including children with dyslexia [10]. Their approach advocated a multisensory method based on the analysis language. A phonic-based visual, auditory, and kinesthetic approach to the teaching of reading provided the basis of this method. Children would be asked first to say a word aloud. Then they were shown how to write the word, then how to listen to the word, and finally they would be asked to model the word using modeling clay [3]. For example, if a teacher wants to reinforce the sound of the letter "A," a common method would be for the teacher to have the child say the "A" sound while writing the letter "A" in the air. In this way, the child uses his sight, his hearing, and the sense of touch to reinforce the sound that the letter "A" makes. Another method would be to have the child draw the letter in shaving cream or in wet sand while simultaneously making the sound associated with that letter. The following quote on the website of the Lexicon Reading Center also explains the benefit of a multisensory approach in teaching children with dyslexia to read: "Using a multisensory teaching technique means helping a child to learn through more than one sense. Most teaching techniques are done using either sight or hearing (visual or auditory). The child's sight is used in reading information, looking at text, pictures or reading information based from the board. The hearing sense is used to listen to what the teacher says. The child's vision may be affected by difficulties with tracking or visual processing. Sometimes the child's auditory processing may be weak. The solution for these difficulties is to involve the use of more of the child's senses, especially the use of touch (tactile) and movement (kinetic). This will help the child's brain to develop tactile and kinetic memories to hang on to, as well as the auditory and visual ones" [11]. The multisensory techniques that could be used to assist a student in his/her learning include: 1) visual teaching methods

(which involve sight); 2) auditory teaching methods (which involve listening); 3) tactile teaching methods (which involve the sense of touch); 4) kinesthetic teaching methods (which involve body movement).

Conceptually, phonic-based instruction focuses on teaching individual sounds of letters or letter combinations, rather than teaching whole words or word families. It uses systematic phonics, stressing the alphabetic principle in the initial stages of reading development. It takes advantage of the sound/symbol relationships inherent in the alphabetic system of writing. Spoken words are made up of individual speech sounds, and the letters of written words graphically represent those speech sounds. Thus, what Mr. Nikumbh does to teach Ishaan is proven based on the concept of a phonic-based approach. Based on the concept of the sequential method, it is proven that what Mr. Nikumbh does by teaching Ishaan step by step from a simple lesson to a complex one until Ishaan masters each level of language skills is successful. A structured, systematic, and cumulative approach means that lessons are organized with specific patterns and activities, following a familiar routine. Each new lesson includes a review of previously learned material, and concepts are reinforced through practice or repetition. Thus, it is proven that the way in which Mr. Nikumbh teaches Ishaan suits the concept of the OG approach's last element, that is the structured, systematic, and cumulative element.

## 4. Conclusion

These findings don't address whether the Orton-Gillingham approach characterized by 1) multisensory; 2) phonic-based; 3) sequential; and 4) structured, systematic, and cumulative elements is effective or not in overcoming dyslexia. The effectiveness of applying this approach is not proven either. However, it is one of the approaches adopted as an instructional model that is likely to be used for many years in dealing with children who suffer from dyslexia. It is as well to prove that the scenes from the movie and the kind of approach applied by Mr. Nikumbh are similar to the Orton-Gillingham approach. Payne and Turner added that a linguist defines dyslexia in terms of children's language skills [6]. Teachers, though, tend to be concerned not with causes but effects and how these effects may be countered. Thus, to sum up, knowing and identifying the symptoms of dyslexics as early as possible can help parents and teachers to manage the problems of dyslexics so that they can apply the appropriate learning strategies.

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## Conflict of Interest

Authors declare that there is no conflict of interest in this research.

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