

## The Effectiveness of Morphological Awareness Training with Play on Dyslexia in Students with Specific Learning Disability

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### Abstract

#### Introduction

Specific learning disability (SLD) is disability or disorder that as the Individuals with Disabilities Education Act (IDEA) defines it, affects a specific academic skill or domain. According to IDEA, SLD is defined as follows: The term “specific learning disability” means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, and this disorder may manifest itself in the imperfect ability to listen, think, speak, read, spell, or do mathematical calculations. Such a term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Such a term does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities; of mental retardation; of emotional disturbance; or of environmental, cultural, or economic disadvantage (Jacobs, Flanagan & Alfonso, 2016).

One of the main problems of students with SLD is Dyslexia. “Developmental Dyslexia” is the most widely used term for children who experience severe difficulties in learning to decode print. Children with dyslexia find it hard to recognize printed words, have great difficulties “sounding out” unfamiliar words, and often also read slowly. In European languages, which have more regular writing systems than English, the main symptoms of dyslexia are poor reading fluency and spelling, but the predictors of reading (and dyslexia) are the same, namely letter knowledge, phoneme awareness and rapid naming (RAN) skills (Hulme & Snowling, 2016).

Therefore, several interventions have been used to improve dyslexia in students with SLD, one of which is morphological awareness instruction. Researchers have documented that a conscious awareness of the morphology is related to reading skills (Cunningham & Carroll, 2015). Words are composed of

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morphemes, the smallest units of language that convey meaning. Morphemes can be free (i.e., base 1 words; book, clap, good, hook) or bound (i.e., prefixes and suffixes, collectively known as affixes; books, clapped, goodness, unhook). Words that consist of a free morpheme only are monomorphemic, and words that contain both free and bound morphemes are multimorphemic. Multimorphemic words can be inflected or derived. Inflected morphemes change the tense or number of a free morpheme (e.g., clapped, books), whereas derived morphemes change the part of speech and/or meaning of the base word (e.g., goodness, unhook). Prefixes always modify the meaning of a base word, whereas suffixes may or may not affect base words' meanings (Apel & Werfel, 2014). Morphological awareness refers to an individual's ability to consciously consider the structure of words in terms of the smallest meaningful units and to analyze and manipulate these units (Larsen & Nippold, 2007; Apel & Werfel, 2014). Morphological awareness can be operationalized as an individual's performance on tasks that require conscious analysis of the morphological structure of words (Berninger, Abbott, Nagy & Carlisle, 2010; Apel & Werfel, 2014).

### **Purpose**

The purpose of this study was to investigate the efficiency of play therapy based on morphological awareness on dyslexia in students with SLD.

### **Materials & Methods**

This study was a pre-test/ post-test control group design. The statistical population of this study included all female students with SLD that studied at second grade in schools of Dorche city in 2016. The sample included 30 students selected by Simple Random Sampling from this population and then assigned into two groups of 15 people (experimental group and control group). The experimental group received the play therapy based on morphological awareness in 10 sessions and 3 times a week. At this time, the control group did not receive any intervention. The study data was collected by the NAMA reading and dyslexia test (korminori & Moradi, 2005) and teacher-made test of reading. MANCOVA analysis was used to analysis the data.

### **Results**

The results showed the efficiency of play therapy based on morphological awareness on dyslexia in components of chain words ( $F=9.270$  and  $P=0.006$ ), reading time ( $F=5.596$  and  $P=0.027$ ) and correct reading ( $F=5.264$  and  $P=0.030$ ) is significant at  $\alpha=0.05$  level. But, it is not effective on reading words ( $F=1.696$  and  $P=0.206$ ) and reading nonwords ( $F=0.660$  and  $P=0.425$ ) for these students.

### **Conclusions**

According to the results of this study, since morphological awareness is related to perceiving words and also, it is effective in defining words. These results are in accordance with the results of various studies, as such as (Apel & Werfel, 2014; Good, et al., 2014; Wouters & Ghesquière, 2015; Cunningham & Carroll, 2015; Vaknin-Nusbaum, et al., 2016; Lyster, et al., 2016). Therefore, it is suggested to use play therapy based on morphological awareness for diminishing dyslexia in students with specific learning disability.

**Keywords:** Morphological awareness, Dyslexia, Specific learning disability