



Mnemonic Technique Enhancing Learning Skills in School Students with Learning Disabilities

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ABSTRACT

Introduction: Dyslexia is a learning disorder that involves difficulty reading due to problems identifying speech sounds and learning how they relate to letters and words (decoding). Also called reading and learning disabilities that affect the ability to understand or use spoken or written language, do mathematical calculations, coordinate movements, or direct attention. By using Mnemonic Technique we can help the disabled children to memorize a phrase or idea with patterns. Aim: To evaluate the effectiveness of Mnemonic technique in improving learning skills in students with learning disabilities. Objective: The objective of the study is to find out the effectiveness of mnemonic techniques in improving learning skills of the students with disabilities by using Dyslexia screener and Colorado learning difficulties questionnaire (CLDQ- R) Method: This is a Pre and Post experimental study used to assess the learning disabilities in students with age between 5-12years. The participants are trained with mnemonic study technique for the duration of one hour per day for 5 sessions in a week. All participants were assessed using the Dyslexia screener and Colorado learning difficulties questionnaire. Baseline assessment of the students was done on the first day and reassessments were done after 2 months. Result: The result showed that there was a significant difference in mean values of pre and post test scores of outcome measures of dyslexia screener and Colorado learning disability questionnaire. Conclusion: The study concluded that mnemonic techniques are effective in improving the learning skills in students with learning disabilities.

Key Words: learning disability; mnemonic technique; dyslexia screener; Colorado learning disability questionnaire (CLDQ)

INTRODUCTION

Dyslexia is a learning disorder that involves difficulty reading due to problems identifying speech sounds and learning how they relate to letters and words (decoding). Also called reading disability, dyslexia affects areas of the brain that process language.

People with dyslexia have normal intelligence and usually have normal vision. Most children with dyslexia can succeed in school with tutoring or a specialized education program. Emotional support also plays an important role. Signs of dyslexia can be difficult to recognize before your child enters school, but some early clues may indicate a problem. Signs that a young child may be at risk of dyslexia include:

- Late talking
- Learning new words slowly
- Problems forming words correctly, such as reversing sounds in words or confusing words that sound alike
- Problems remembering or naming letters, numbers and colors
- Difficulty learning nursery rhymes or playing rhyming games

Once the child is in school, dyslexia signs and symptoms may become more apparent, including:

- Reading well below the expected level for age
- Problems processing and understanding what he or she hears
- Difficulty finding the right word or forming answers to questions
- Problems remembering the sequence of things
- Difficulty seeing (and occasionally hearing) similarities and differences in letters and words
- Inability to sound out the pronunciation of an unfamiliar word
- Difficulty spelling
- Spending an unusually long time completing tasks that involve reading or writing
- Avoiding activities that involve reading

Preschool- and kindergarten-level red flags

These may include: difficulty learning nursery rhymes or recognizing rhyming patterns; lack of interest in learning to read; difficulty remembering the names of letters in the student's own name or learning to spell or write their own name; difficulty reciting the alphabet; misreading or omitting smaller words; and stumbling through longer words.

Elementary-level red flags

These may include: reversing letters or the order of letters (after first grade); spelling phonetically; having accurate beginning and ending sounds but misspelling the word; not using words in writing that they would use in oral language; and disorganized writing, such as a lack of grammar, punctuation, or capitalization. These students may also have dysgraphia.

Middle school-level red flags

These may include: lack of awareness of word structure and of knowledge of prefixes and suffixes to support reading; lack of smoothness or fluency when reading aloud; difficulty with reading comprehension and learning new information from text; difficulty learning new vocabulary or other language; better performance on oral exams than on written, timed tests; and avoidance of reading for pleasure or reading aloud.

High school-level red flags

These may include: childhood history of reading or spelling difficulties because these can persist over time; a tendency to read with a great effort at a slower pace; continued avoidance of reading for pleasure; difficulty taking notes in lecture-based classes; and sacrificing their social lives for studying.

Learning disabilities are disorders that affect the ability to understand or use spoken or written language, do mathematical calculations, coordinate movements, or direct attention. By using mnemonic Technique we can help the disabled children to memorize a phrase or idea with patterns. These techniques can include songs, poems, images, and acronyms; it will give meaning to something ordinary to make it more memorable when we try to recall it.

AIM

To evaluate the effectiveness of Mnemonic technique in improving learning skills in students with learning disabilities

OBJECTIVE

The objective of the study is to find out the effectiveness of mnemonic techniques in improving learning skills of the students with disabilities by using Colorado learning difficulties questionnaire

NEED FOR THE STUDY

The advantages of mnemonics are two-fold. First, they help students encode information in long-term memory. And, second, and which is even more important, mnemonics help students retrieve information from long-term memory. Mnemonic strategies are systematic procedures for enhancing the memory and making information more meaningful. There are many different retrieval strategies that have been developed and that can be implemented to aid in the recall of new and unknown information. The fundamental aspect in developing mnemonic strategies is to find a way to relate new information to information that is already in the long-term memory of students. If this connection can be made, the memory of this information has the potential of being remembered for a very long time. . Present study was aimed with this reason to improve learning skill in disability students

MATERIALS AND METHODOLOGY

Materials: - Paper, Pen, Table, Chair, Questionnaire

Study Design: - Pre and post experimental study design

Study Setting: - Thanthai Roever college of Physiotherapy- OPD

Sample Size: - Total number of samples - 10 students

Study Duration: - 2months

Tool: - Dyslexia screener

-Colorado learning difficulties questionnaire

PROCEDURE: - This is a Pre and Post experimental study used to assess the learning disabilities in students with age between 5-12years. The attendee's of Participants were given proper information regarding the study. The participants are trained with mnemonic study technique for the duration of one hour per day for 5 sessions in a week. All participants were assessed using the Dyslexia screener and Colorado learning difficulties questionnaire. Baseline assessment of the students was done on the first day and reassessments were done after 2 months.

STUDY TECHNIQUE

MNEMONIC PEG SYSTEM The mnemonic peg system, invented Hendry Herdson is a memory aid that works by creating mental associations

between two concrete objects in a one-to-one fashion that will later be applied to to-be-remembered information. Typically this involves linking nouns to numbers and it is common practice to choose a noun that rhymes with the number it is associated with. These will be the pegs of the system. These associations have to be memorized one time and can be applied repeatedly to new information that needs to be memorized. Example: VIBGYOR

NUMBER-RHYME PEG The number rhyme peg system is the easiest peg memory system to learn. For each of the numbers from 1 to 10 we have to associate with each number a word that rhymes with that number.

NUMBER-SHAPE PEGS In number-shape peg system we should use shape of the number as a peg

ALPHABET PEGS CONCRETE & SOUND ALIKE using the known alphabet with little modification we can use it as another type of mental filling system. There are two ways

Based on concrete meaning A – Apple, B – Boy, C – Cat, D – Dog, E – Egg. Based on sound a likes A – Hay, B – Bee, C – See, D – Deed, E – Edward

CHUNKING METHOD Chunking is a process by which individual pieces of an information set are broken down and then grouped together in a meaning full whole.

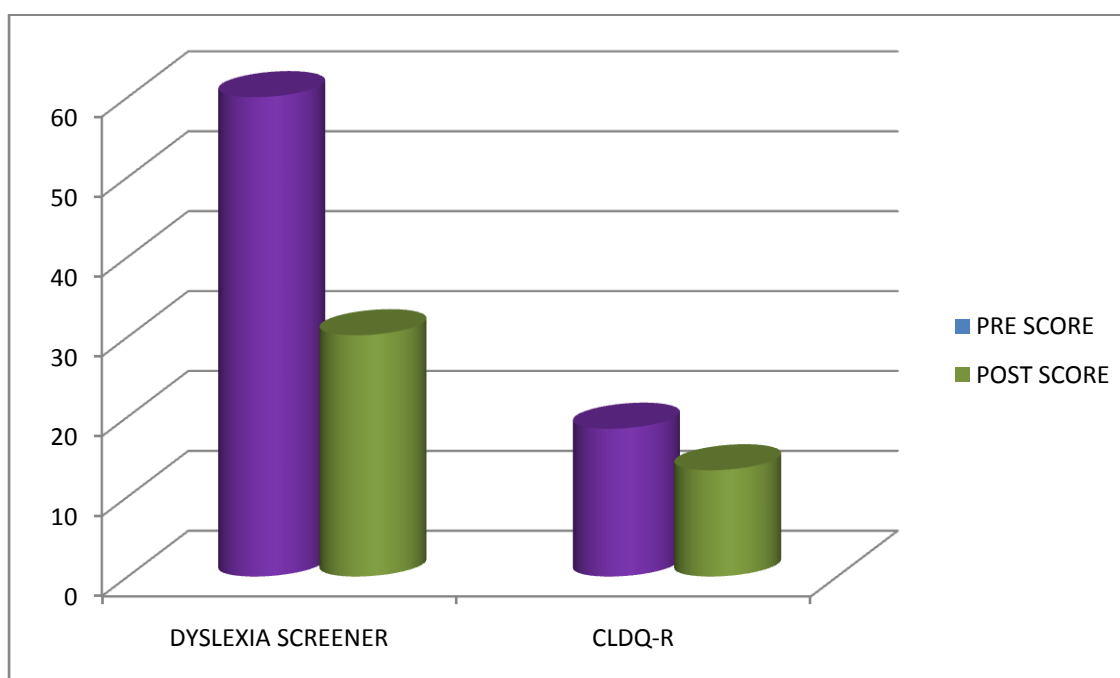
THE FACE NAME MNEMONIC METHOD The face name mnemonic method has been shown to be effective in aiding in the recall of names when prompted with faces. This strategy deals with associating a person's face with their name by using a keyword

DATA INTERPRETATION

TABLE 1 Represents pre and post values of Dyslexia screener and Colorado learning disability questionnaire (CLDQ-R)

Tool	N	Pre score	Post score	Mean		SD		Df	SED	T value
				Pre	Post	pre	post			
Dyslexia screener	10	600	302	60	30.2	2.9	3.1	18	1.3	22.2
CLDQ-R	10	185	133	18.5	13.3	2.27	2.21	9	0.2	26

GRAPH 1 Represents pre and post values of Dyslexia screener and Colorado learning disability questionnaire (CLDQ-R)



RESULT

The result showed that there was a significant difference in mean values of pre and post test scores of outcome measures of dyslexia screener and colorada learning disability questionnaire.

DISCUSSION

Students with learning disabilities may display a deficit in either short-term or long-term memory retrieval or both. These processing deficits impact one's ability to retrieve information that was previously learned and/or manipulate and store information being processed. Instruction for students with special needs involves selecting strategies that target or enhance their processing strengths and weaknesses. For students with documented weaknesses in memory, a mnemonic becomes a targeted approach for increasing student performance

10 participants were included in this pre and post experimental study, according to the inclusion criteria, the result showed that, there is a significant difference in mean value of pre and post test scores. The concentration level, memory power, the capability of learning is better comparing with studying in an ordinary method. The current study proved that study techniques are effective in improving the learning skills in students with learning disabilities

CONCLUSION

Learners are required to learn more information and more complex content. Mnemonic strategies have been proven to help individuals remember information by making it easier to remember and more concrete. These strategies work with students with learning disabilities and it can be applied to any type of content. Although mnemonic strategies can be very beneficial, it is important to choose the correct method or it will not benefit the learner.

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