



REVIEW OF RESEARCH

ISSN: 2249-894X

IMPACT FACTOR : 5.7631 (UIF)

VOLUME - 11 | ISSUE - 4 | JANUARY - 2022



“EARLY IDENTIFYING CHILDREN FOR INTERVENTION OF MINIMIZING THE RISK OF DYSLLEXIA”

Suvarna Vishwajeet Thakur

Research Scholar, Department of Psychology,
Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

ABSTRACT:

Objective of This Study: 1) There are the associations of three major phonological processing skills (phonological awareness, rapid automatized naming and verbal short-term memory) to word recognition. The present study aimed to examine the phonological processing skill for word recognition. 2) This study was designed to contribute to our understanding of the instructional conditions that need to be in place to prevent reading disabilities in young children. 3) Early identification of children having learning disorder to minimize the risk of dyslexia. Hypotheses: 1) Difficulties in phonological processing are good indicators for diagnosing dyslexia. 2) Phonological processing ability plays a causal role in the acquisition of reading skill. 3) There will be positive correlation between the phonological processing skill of a child and his academic achievement. 4) Training in phonological awareness can be shown to improve success in early reading. Participants Children were selected to participate in the study from a kindergarten school located in N-3 Cidco, Aurangabad area. Participants were 100 (50 boys, 50 girls) kindergarteners from Foundations KG School in Aurangabad. Experimental measures.Tool: Differential Ability Scales (DAS-II) Conclusion: 1) From the above study it can be seen very clearly, the students who are academically good achievers have good phonological processing skill. In the same way the students who are having poor phonological skills also poor performer in academics. 2) Poor phonological processing is good indicator of dyslexia. 3) Hence phonological processing scales like DAS ii helps us to identify the learning disabled students for early intervention. 4) Thus hypothesis 1,2 & 3 follows. Further study is needed for proving hypothesis 4 by giving phonological training to identified learning disabled students.



Participants Children were selected to participate in the study from a kindergarten school located in N-3 Cidco, Aurangabad area. Participants were 100 (50 boys, 50 girls) kindergarteners from Foundations KG School in Aurangabad. Experimental measures.Tool: Differential Ability Scales (DAS-II) Conclusion: 1) From the above study it can be seen very clearly, the students who are academically good achievers have good phonological processing skill. In the same way the students who are having poor phonological skills also poor performer in academics. 2) Poor phonological processing is good indicator of dyslexia. 3) Hence phonological processing scales like DAS ii helps us to identify the learning disabled students for early intervention. 4) Thus hypothesis 1,2 & 3 follows. Further study is needed for proving hypothesis 4 by giving phonological training to identified learning disabled students.

KEYWORDS: major phonological processing skills , diagnosing dyslexia, prevent reading disabilities.

INTRODUCTION

For the child having difficulty acquiring phonemic awareness, the prognosis is not good. First, such a child is not able to take advantage of the alphabetic principle. She might know the letters, even that the letters are somehow connected to the spoken word, but without phonemic by what that relationship might be. Awareness, she is baffled Second, we know that exposure to print is important for figuring out the relationships between letters and phonemes. With the prerequisites in hand

(namely, knowledge of the letters, phonemes, and the alphabetic principle), the greater the opportunity to pair printed and spoken words, the greater the opportunity to learn the relationship between letters and phonemes. The child who lacks these prerequisites cannot take advantage of such opportunities, and print exposure is no longer efficacious for learning to read. Third, we know that if the child is not making progress in reading by the third grade, there is very little likelihood that she will ever, regardless of the intervention used, be able to read at the same level as her same-age peers. The broader aspect of phonological processing is also important in reading by older children,

DYSLEXIA,

Dyslexia also known as reading disorder, is a learning disability characterized by trouble with reading despite normal intelligence. Different people are affected to varying degrees. Problems may include difficulties in spelling words, reading quickly, writing, "sounding out" words in the head, pronouncing words when reading aloud, and understanding what one reads. Often these difficulties are first noticed at school. When someone who previously could read loses their ability, it is known as alexia. Dyslexia is caused by phonological processing problem. Dyslexia affects upto one in five people.

PHONOLOGICAL PROCESSING

Phonological processing is the ability to see or hear a word, break it down to discrete sounds, and then associate each sound with letter/s that make up the word. Phonological processing is an auditory processing skill. It relates to words, but occurs in the absence of print. It involves detecting and discriminating differences in phonemes or speech sounds under conditions of little or no distraction or distortion. Phonological processing refers to the use of phonological information (i.e., the sounds of one's language) in processing written and oral language. Phonological processing skills refer to those required in the processing of written and oral language with the use of phonological information (Wagner & Torgesen, 1987). Over past decades, empirical research has demonstrated the importance of phonological processing skills in early reading acquisition (e.g., Bradley & Bryant, 1985; Siok & Fletcher, 2001). The importance of phonological processing skills for reading is not specific to alphabetic orthographies. Rather, there is some evidence that phonological processing skills are also useful for reading non-alp abetic scripts,

Wagner and Torgesen (1987) identified three primary phonological processing skills. These were phonological awareness, phonological recoding in lexical access, and short-term verbal memory. Longitudinal studies have demonstrated that the relationship between phonological processing abilities and reading-related knowledge is bidirectional. We all have a phonological processing system which is used to process basic word sounds. These basic word sounds are called phonemes. This is what children tend to learn when they first start school; for example, for the letter B they may say "ber" instead of "bee". These phonemes are put together to form spoken words.

The phonological processing system's main role is to analyse and manipulate sound structures of words. This means that you can hear the sounds of the words and convert them into letters on a page (spelling). You can also see letters on a page and convert them into something you can hear (reading). Careful evaluation of causal relations between phonological processing and the acquisition of reading skills is especially important because the development of many cognitive skills and the acquisition of reading usually proceed hand in hand.

OBJECTIVE OF THIS STUDY:

- 1) The research paper consists of the following objectives: There are the associations of three major phonological processing skills (phonological awareness, rapid automatized naming and verbal short-term memory) to word recognition. The present study aimed to examine the phonological processing skill for word recognition.
- 2) This study was designed to contribute to our understanding of the instructional conditions that need to be in place to prevent reading disabilities in young children.
- 3) Early identification of children having learning disorder to minimize the risk of dyslexia.

HYPOTHESES:

- 1) Difficulties in phonological processing are good indicators for diagnosing dyslexia.
- 2) Phonological processing ability plays a causal role in the acquisition of reading skill.
- 3) There will be positive correlation between the phonological processing skill of a child and his academic achievement.
- 4) Training in phonological awareness can be shown to improve success in early reading.

RESEARCH VARIABLES:

Independent Variable - Phonological processing ability.

Dependent Variable - Academic achievement,

RESEARCH METHODOLOGY:**Participants.**

Children were selected to participate in the study from a kindergarten school located in N-3 Cidco, Aurangabad area. Participants were 100 (50 boys, 50 girls) kindergarteners from Foundations KG School in Aurangabad. Experimental measures:

Pre-tests

An extensive battery of pre-tests of Differential Ability Scale (DAS ii) was given to the 100 children in the two treatment groups. The battery covered a broad range of cognitive abilities and pre-reading skills in order to provide the basis for estimating child characteristics that might influence response to the educational interventions in the study.

Tool: Differential Ability Scales (DAS-II)

DAS-II helps to find out why a child isn't learning, and targets the specific nature of the problem, so that appropriate intervention strategies can be identified. It's a well rounded assessment of a child's strengths and ability that also enables measuring change over time, in order to monitor progress. Dr. Colin Elliott, DAS-II author" The Differential Ability Scales (DAS-II) were developed as an evaluation tool for the cognitive ability and achievement of children. Psychologists depend on the DAS II to provide insight into the manner in which a child processes information, giving solutions to fix learning problems. For testing, the participants from the ages of 2-6 or 11-1 years must respond to 63 multiple-choice items. There are four different forms for the test: Preschool, School Age, Cognitive Battery, School Achievement. Approximately 45-60 minutes is required for completion.

Procedure

Participants were initially tested in 30-min sessions on tasks of Phonological Processing (Rhyming words Blending of two words ,Deletion, phonemic identification and segmentation) by differential ability scale individually by trained undergraduate psychology majors in a quiet room in the school during school hours. The pre-test battery included measures of three types of phonological processing including phonological awareness (Sound Rhyming, Deletion. Phoneme identification and segmentation and Blending Phonemes). We also took and referred the scholastic or academic achievement test scores for our further assessments. Both the academic scores and Subtest scores of DASil are compared and analysed for further study.

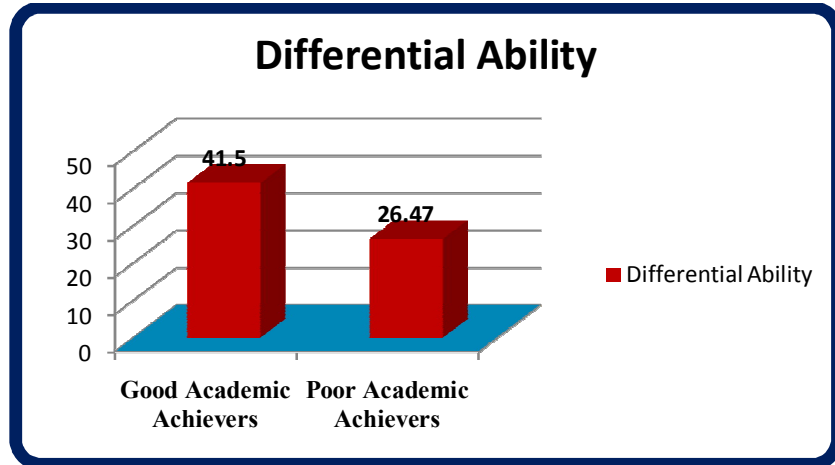
Plan of Analysis:

It was planned to compute the t-test of significance as there are only two groups. If t-value is greater than corresponding values of t-ratio, it is significant at both the levels ie. 0.05 level and 0.01 level. If t- value is less than corresponding values of t- ratio, it is significant at both the level ie. 0.05 level and 0.01 level. If there is significance at both the levels, the group with higher mean is considered to have good phonological processing skill.

Statistical Analysis and Discussion

Differential Ability among Good Academic Achievers and Poor Academic Achievers Mean S.D. and “t” Value.

Dimension	Good Academic Achievers		Poor Academic Achievers		df	t
	Mean	SD	Mean	SD		
Differential Ability	41.50	5.67	26.47	6.78	98	12.02**



The calculated t-value is found to be greater than the value corresponding to t - ratio table hence there is the significance difference of phonological processing skill between good academic achiever students and poor academic achiever students. Hence the group with higher mean is supposed to be having good phonological processing skill when compared to the group with lower mean.

LIMITATION OF THE STUDY:

- 1) There are three phonological processing skills which are required for good reading ie, phonological awareness, rapid automatized naming and verbal short term memory. But in the present study we examined only phonological awareness of the child for identifying his learning ability.
- 2) The study is limited to examining the phonological process of kindergarten school only. This study can be employed to the school students also for identifying learning disability for early intervention.
- 3) The study is limited to urban area of Aurangabad district only.

CONCLUSIONS:

- 1) From the above study it can be seen very clearly, the students who are academically good achievers have good phonological processing skill. In the same way the students who are having poor phonological skills also poor performer in academics.
- 2) Poor phonological processing is good indicator of dyslexia.
- 3) Hence phonological processing scales like DAS ii helps us to identify the learning disabled students for early intervention.
- 4) Thus hypothesis 1,2 & 3 follows. Further study is needed for proving hypothesis 4 by giving phonological training to identified learning disabled students.

REFERENCES:

- Bonnie Wing-Yin Chow and Catherine McBride-Chang Phonological Processing Skills and Early Reading Abilities in Hong Kong Chinese Kindergarteners Learning to Read English as a Second Language : Journal of Educational Psychology, 2005, Vol. 97, No. 1, 81-87, Psychology Copyright 2005 by the American Psychological Association.
- Joseph K. Torgesen Richard K. Wagner Carol A. Preventing Reading Failure in Young Children with Phonological Processing Disabilities: Group and Individual Responses to Instruction; Journal of Educational Psychology, In press, supported by grant number HD30988 from the national Institute of Child Health and Human Development, and by grants from the national Center for Learning disabilities, and the Donald D. Hammill Foundation.
- Mary Abbott; Cheryl Walton; Charles R Greenwood; Research to practice: Phonemic awareness in kindergarten and first grade Teaching Exceptional Children; Mar/Apr 2002; 34, 4; Education Periodicals.pg. 20.
- Morag Stuart (Psychology and Special Needs Group, Institute of Education, London University), Getting ready for reading: Early phoneme awareness and phonics teaching improves reading and spelling in inner-city second language learners; British Journal of Educational Psychology (1999), 69, 587-605.
- Richard K. Wagner and Joseph K. Torgesen Florida State University: The Nature of Phonological Processing and Its Causal Role in the Acquisition of Reading Skills; Psychological Bulletin 1987, Vol. 101. No. 2, 192-212.