

Comparing the Phonological Skills Between Preschool Boys and Boy Students of 1st Year of School

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Abstract: Phonological awareness is as one of the phonological aspects of speech development. By this ability, the one have access to speech vowel in words, which their constituent vowels can be manipulated. As phonological awareness develops, the ability of discovering, comparing and judgment about units smaller than word (rhyme, syllable and phoneme), develops in child. This study's aim is to compare phonological skills between preschool boys and boy students of 1st year of school of Ardabil city. Statistical population of this study consists of all preschool children and children of 1st year of school of Ardabil city (Iran) at 2008 ranging 6-7 years old. Sample consisted of 60 students; 30 preschool and 30 students of 1st year of school. To collect data following forms were used; phonological awareness form; syllable awareness form, rhyme awareness form and alliteration skill form. To analyze data, MANOVA method was used besides mean and standard deviation. Results showed that students of 1st year of school have more improved function in all aspects of phonological awareness skills, than preschool children.

Key words: Phonology, phoneme, syllable, rhyme, alliteration, vowels

INTRODUCTION

Phonological awareness is as one of the phonological aspects of speech development. By this ability, the one have access to speech vowel in words, which their constituent vowels can be manipulated. As phonological awareness develops, the ability of discovering, comparing and judgment about units smaller than word (rhyme, syllable and phoneme), develops in child. Alliteration is the ability of recognition the onset and syllables and it has an important role in saving of word expressing and spelling. In syllable composition, the child should be able to compose word's portions and generate the word. In the syllable analysis related activity, the child separates the word into distinct syllables and phonemes. Rhyme awareness is indicative of one's awareness about main portions of syllable i.e., onset and rhyme. Half of preschool children have considerable problems about speech perception and phonological awareness, in spite of that their perceptual skill is at moderate level and is upper than normal range. Speech perception is the main factor that influences the phonological awareness, directly and indirectly through conversational skills. It is possible to anticipate reading status through measurement of phonological awareness skills. The rate of phonological awareness and letter recognition of preschool children can provide us with

information for prediction of reading level of children who study at 1st and 2nd year of school, reading level of 2nd year student (of school), also, can supply information relevant to prediction the reading level of students in 3rd and 4th year of school. Phonological awareness relates to extensive level of skills and language processing, directly and effectively. Also, it has a special place in assessment, diagnosis and treatment of children with speech and language growth delay, hard of hearing, dysphasic and some sorts of cerebral palsy and learning problems.

Different studies about phonological awareness and its related factors, show different results and sometimes similar results.

In the more recent survey performed at Gillon University at 2007, it has been demonstrated that huge amount of structural mistakes of syllables are related to phonological awareness weakness and also children whose speech developing skills at the end of 1st year of school is proportionate to their age, have phonological awareness skills proportionate to their age, too. In two surveys at 1997 and 1984, it was shown that if the test's material are words and it is possible to apply this index for prediction of lower level function in the context of phonological awareness skills and finally prediction of in-articulation. Gillon (2007) performed a study on 99 children (4.7-6.8 years old) about role of phonological awareness intervention and reading skills acquaintance,

it was demonstrated in secondary assessment that those children who have received phonological awareness' interventions and drills, were fulfilling word spelling and rhyme awareness exercises, better than control group. On the basis of a survey performed (2005) at Tehran on Persian speaking children, it was demonstrated that ability of boys and girls in rhyme awareness and alliteration skills, is equal and the child, at first, acquire the ability for scanning of word and syllable and then he/she can separate the syllable into intra-syllable portions. And also, it was shown that ability of syllable composition is attained after skills of syllable recognition and separation (Dstjrdi, 2005).

On the basis of results of such researches, it was suggested that phonological awareness can be used is opportune assessment and recognition of children suspected to reading problems. By using the methods and training those results in phonological awareness growth in children, it is possible to positively influence their reading level.

Results of statistical test are indicative of significant difference between two groups (inarticulate and normal) in mentioned skills and phonological awareness skills are weaker in articulate group than normal. Also, there was no significant correlation between phonological awareness skills and reading speed, the naming speed is independent of phonological awareness. In a research performed on 7-12 years old mental retard children of Isfahan city (Stephanie, 2008), no significant difference was observed between two genders in phonological awareness skills. The most and least average of phonological awareness skills of girls was related to phoneme composition and skill at middle syllable awareness, respectively. In boys, highest score was in phoneme composition and lowest score was in middle syllable awareness. Results of a survey under the title of comparing the phonological awareness of first class girl students (Christopher and Annabel, 2000) are as following: scores mean of phonological awareness test in first class girls student were 51.98 and 57.46, in phonic method and whole reading, respectively and mean difference of these two groups wasn't statistically significant. Then, there is significant relation ship between phonology and reading ability. Stanovich and Brayant (1995) in their surveys about reading and phonological awareness indicated to close relation between phonological awareness and reading function in the preliminary stages of learning. Liberman (2005) also, states that phonological awareness, links speech language to writing language in preliminary experience of learning. Then, during reading colloquial language that is familiar for child, is represented logically and systematically.

Torgesen (1987) believes that phonological awareness provide a better prediction of reading development, compared to intelligence tests. Therefore, considering following issues, we decided to compare the phonological awareness of preschool children with 1st year school students of Ardabil city, phonological awareness ability is an important factor in growth of speech and language and also in reading and writing. In the psychological view of language, phonological awareness assessment is an important part of children evaluation whose speech and language development isn't normal, our country's limitation, based on this presupposition that following item is superior in children of 1st year of school than preschool one; ability of phonological awareness at the levels of syllable (recognition, composition and separation), rhyme and alliteration.

MATERIALS AND METHODS

This is a descriptive-analytical study. Statistical population of this study consists of all preschool children and children of 1st year of school of Ardabil city (Iran) at 2008. Subjects (n = 60) were selected by cluster sampling, 30 from preschool children and 30 from children of 1st year of school. Preschool children were 6 years old and children of 1st year of school were 7 years old.

Tools: These tools comprises following: forms of syllable awareness, rhyme awareness and alliteration skill, which were executed by tester on two groups of children.

Syllable awareness form: The child should recognize the asked syllables in following sites; onset of two-syllable words and end of two-syllable words. It means that he/she should recognize 4 distinct different syllables in four sets of words (each set contains 4 word).

Rhyme awareness form: There are two lists that each of them includes four words. The child should be able to recognize a word in each list with different rhythm.

Alliteration skill form: In this survey, it has specified in two ways: the child should be able to recognize a word in each list (that includes three words) with different onset phoneme. The child should be able to build minimally one and maximally two words, with each of two onset phoneme that are specified for him/his.

To collect data, at first, researcher referred to school and kindergartens, then they assessed children's visual and auditory status using medical unit.

At next step, tester executed following forms to assess the phonological awareness form; syllable awareness form, rhyme awareness form and alliteration skill form.

Dependent variables are as following; syllable awareness, rhyme awareness and alliteration skill and independent variable is the age. To arrange and explain data, descriptive statistic method, including frequency distribution table and charts was used. The data were analyzed by SPSS software and MANOVA method.

RESULTS

Children, who participated in this survey, haven't had any problem in auditory and visual fields. Most children of this sample were from moderate socioeconomic class and they haven't undergone any special training except class lessons.

According to Table 1, in the syllable awareness sub-test and in the syllable separation section, obtained mean of preschool and school children were 2.70 and 4.33, respectively and their standard deviations were 0.87 and 0.71, respectively. Total mean and total standard deviation (of both groups) were 3.51 and 1.14, respectively. Results show that in the sub-test of syllable awareness (in the syllable composition), obtained mean of preschool and school children were 2.33 and 3.10, respectively and their standard deviations were 1.13 and 1.18, respectively. Total mean and total standard deviation (of both groups) were 2.66 and 1.23, respectively. On the basis of Table 1, in the sub-test of syllable awareness and in the syllable recognition section, obtained mean of preschool and school children were 7.30 and 11.60, respectively and their standard deviations were 1.46 and 1.77, respectively. Total mean and total standard deviation (of both groups) were 9.45 and 2.70, respectively. In the rhyme awareness sub-test, obtained mean of preschool and school children were 1.20 and 1.56, respectively and their standard deviations were 0.66 and 0.56, respectively. Total mean and total standard deviation (of both groups) were 1.38 and 0.64, respectively. In the alliteration skill subtest, obtained mean of preschool and school children were 2.13 and 3.83, respectively and their standard deviations were 0.97 and 1.11, respectively. Total mean and total standard deviation (of both groups) were 2.98 and 1.34, respectively.

Phonological awareness ability at level of syllable (recognition, composition and separation), rhyme and at level of alliteration, is higher in the children of 1st year of school than preschool children.

As it is shown in the Table 2, there is significant difference. Between groups (preschool and school children in the following items; syllable separation,

Table 1: Statically indexes phonological awareness skills test preschool children and children of 1st year of school

Phonological awareness skills	Groups	Mean	SD
Separation syllable	Preschool	2.70	0.87
	1st year of school	4.33	0.71
	Total	3.51	1.14
Composition syllable	Preschool	2.23	1.13
	1st year of school	3.10	1.18
	Total	2.66	1.23
Recognition syllable	Preschool	7.30	1.46
	1st year of school	11.60	1.77
	Total	9.45	2.70
Rhyme awareness	Preschool	1.20	0.66
	1st year of school	1.56	0.56
	Total	1.38	0.64
Alliteration skill	Preschool	2.14	0.97
	1st year of school	3.83	1.11
	Total	2.98	1.34

Table 2: Abstract of information MANOVA test preschool children and children of 1st year of school

Source	Dependent variable	Type III sum of squares	df	F-value	Sig.
Model	Separation syllable	40.01	1	62.70	0.00
	Composition syllable	11.26	1	104.79	0.00
	Recognition syllable	277.35	1	104.79	0.00
	Rhyme awareness	2.01	1	5.27	0.00
	Alliteration skill	43.35	1	39.51	0.00
Intercept	Separation syllable	742.01	1	1.16	0.00
	Composition syllable	426.66	1	316.99	0.00
	Recognition syllable	535.15	1	2.02	0.00
	Rhyme awareness	111.81	1	300.40	0.00
	Alliteration skill	534.01	1	486.74	0.00
Groups	Separation syllable	40.01	1	62.78	0.00
	Composition syllable	11.26	1	8.37	0.00
	Recognition syllable	277.35	1	104.79	0.00
	Rhyme awareness	2.01	1	5.27	0.00
	Alliteration skill	43.25	1	39.51	0.00

syllable composition, syllable recognition, rhyme awareness and alliteration skill. Then, survey's hypothesis is confirmed that says (syllable separation, composition and recognition), rhyme awareness and alliteration skill, is higher among children of 1st year of school than preschool children.

DISCUSSION

One of the skills that play a fundamental, important role in development of language and speech, is named phonological awareness. Auditory perception is one of background of phonological awareness. The first step of perception is the differentiation.

When the one receive a stimulant at first, he/she should recognize, whether the stimulant is a verbal or non-verbal stimulant (auditory distinct stage). If the stimulant is verbal, the one should recognize that it belongs to her/his own language or to a foreign language. If it is a foreign item, other steps of decoding won't be accomplished, but if it is a common familiar word, next stage of perception (i.e., phonological recognition) will be

activated. In this stage, one's phonological awareness skills help him/his to separate the word into syllables and separate the syllable into its constituent phoneme and recognize the precisely and finally perception is achieved.

This skill's disability (phonological awareness skill) cause cognitive problem in addition to language problems and skill acquisition leads to speech development during preschool age and also mastery over learning the writing language system during school. Development of phonological awareness skill has specific, consecutive constant stages, which appear in child gradually and in different stages. Occurrence of disability and defect in each stage culminates in derangement of next superior stage of speech, language and writing.

Results of this survey resemble results of several studies that are indicative of reading training effect on increase of phonological awareness level (Stephanie, 2008; Datjerdi, 2005; Gillon, 2002; Torgusen, 1987).

Unlike study of Bradley and Brayant (2003), which says that there is no significant difference between children of preschool and school in rhyme awareness skills and alliteration skill, it was shown in current study that mean of these two skills, differs significantly between preschool age and children of 1st year of school.

Results of Stanovich and Brayant (1995) don't accord with this study. They found that children of first and second year of school have significant difference only in rhyme awareness skill and alliteration skill and there isn't significant difference between them in other skills.

CONCLUSION

Current study showed that children of 1st year of school have better circumstance in all parameters of phonological awareness skills, than preschool children that is a significant difference between these two groups.

During 1st year of school, the main insistence is focusing on learning the phonemes, phonemes' analysis and also on their recognition. Therefore, children of 1st year of school can either process phoneme's related data faster or can separate phonemes, syllables and words into their constituent portions because of drill and repetition. But, preschool children function weaker in this

context, because they aren't familiar with these techniques (phoneme separation and composition, phonemes' recognition).

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