

Awareness of Rhyme in Preschool Children with Specific Language Impairment and Without Language Difficulties

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Abstract

Significance of developing the rhyme recognition and production skills is displayed by defining the rhyming skills as one of the activities that develops a sense of the word-sound structures. It is a natural activity of most preschool children, but also a common difficulty for the children with language impairment. Rhyme is a skill associated with the development of reading and spelling that contributes to their later development regardless of the relationship with the phonemic awareness.

The aim of the current study was to compare the rhyming skills in children with and without language impairment. The sample consisted of 120 subjects who were examined by using a subtest of the rhyme recognition and production test.

The obtained results indicated significant differences on the tasks of rhyme identification and production in the children with a specific language impairment (SLI) and the children with the typical language development (TLD). The SLI children had significantly poorer performance on all the tasks, when compared to the TLD children.

It was concluded that, in the developmental period, the awareness of rhyme can be seen as a prerequisite for the occurrence of smaller phonological units such as phonemic awareness, and as an indicator of the later development of reading skills. Special attention should be given to them in monitoring the development of the children with language difficulties.

Key words: awareness of rhyme; specific language impairment; typical language development.

Introduction

Rhyme represents the sound-matching syllables at the end of two or more words. The notice of spontaneous rhyme production skills at an early age has led to extensive research on the production and recognition of rhyme, as well as the concept of rhyme as an important metalinguistic ability. Rhyme is believed to be the first indicator of phonological development since it represents an activity which increases the sensitivity of a child to the sound structure of words, and it is a natural activity for a number of preschool children (van Kleeck, Gillam, & McFadden, 1998).

The awareness of rhyme is the earliest developed form of phonological awareness (Vloedgraven & Verhoeven, 2007). The first spontaneous production of rhyme as a part of children's games is recorded at the age of around 18 months, while its pinnacle reflects between 2 and 3 years of age (Howell, 1989). It has long been considered that the activities of rhyme production at the age of 18 months are a universal ability of language development in children and represent the initial phase of phonological awareness development (Opie & Opie, 1959). The root of phonological awareness lies in the creation of neural pressure on the reorganization of phonological lexicon; as we increasingly acquire sound-similar words, the role of rhyme awareness is very clear in the phonological development (Goswami, 2002).

The universal existence of rhyme in children is explained by the fact that, in the production and "playing" with familiar and unfamiliar words, the spoken attention is directed at the sounds of language much more than at its semantic and grammatical component. At stringing rhymes, the child manipulates familiar words so that it retains some elements of the previous word, and the pattern of minimal changes is established and developed. The ability to focus on the word form, not on the meaning, affects the further development of phonological skills (Jakobson & Waugh, 1979).

The merit of rhyme production to promote the development of phonological skills is reflected through its freedom from other linguistic standpoints, especially the semantic and grammatical characteristics. Jakobson and Waugh (1979) state that the creation of rhyme with meaningful or meaningless words is directed only at the phonetic language characteristics.

The occurrence of production and the recognition of rhyme at an early age is associated with rhythmic activities that accompany a physical activity. Sometimes it is the rhyme that triggers a rhythmic physical activity, which continues even after the rhyme production is over (Garvey, 1977; Howell, 1989).

The role of rhyme has found an important place in the development of language skills. It is believed that playing with the sounds of language enables the adoption of the "sound form of words", and that language is in fact learned through this activity (Elkonin, 1971; Howell, 1989). In addition, through a rhythmic activity, the child discovers that linguistic units can be combined and that there are special rules for this.

It has not yet been clarified why some children can, at an early age, successfully recognize the pairs of words that rhyme (bed-fed), but fail to discover the pairs that

do not rhyme (bell-ball) if their difference is phonetically minimal (Cardoso-Martins, 1994; Carroll & Snowling, 2001; Wagensveld, van Alphen, Segers, & Verhoeven, 2012). This so-called "globally similar effect" has been explained by children's holistic approach to the lexical representations and acoustic similarities in the phonological patterns (Carroll & Snowling, 2001; Hayes, Slater, & Brown, 2009; Noordenbos, Segers, Wagensveld, & Verhoeven, 2013).

The perception of rhyming skills at an early age as a spontaneous activity with no communicative function (Garvey, 1977; Howell, 1989) later allows the child to become conscious of smaller and individual units of a language. The ability to recognize the pattern of rhymes in their native language can be seen as an important factor in the development of early literacy. It has been evident that most children master the basic rhyming skills before reaching the process of learning how to read (Bradley & Bryant, 1983; Chard & Dickson, 1999).

The importance of developing rhyme awareness in the further development of phonological skills, necessary for mastering the reading and writing skills, was presented by Bradley and Bryant in 1983. They showed that rhyme awareness measured at preschool age was an important indicator of subsequent progress in reading and spelling (Bradley & Bryant, 1983). The scientific literature shows controversies in a direct relationship between the rhyming skills and phonemic awareness (Goswami & Bryant, 1990; Morais, 1991). However, although there are suggestions that the rhyme recognition cannot be part of the continuity of phonemic awareness, it is believed that the rhyme recognition and production skills are a valuable activity of children's sensitivity to the sound structure of words (van Kleeck, Gillam, & McFadden, 1998).

Specific language impairment (SLI) is a term defining the disorder in the development of language that is not caused by hearing impairment, intellectual disabilities, cerebral pathology, emotional disorders or severe social deprivation (Leonard, 1998; Schwartz, 2009; Vandewalle, Boets, Ghesquière, & Zink, 2012). In children with SLI there are significant delays and difficulties in the development of individual elements of language structures (Milošević & Vuković, 2011). Language difficulties in these children may be manifested in various degrees, from very hard to very mild. Due to these variations, sometimes a child can be found to have SLI only at the moment of starting school and encountering difficulties with learning, reading and writing (Blaži & Banek, 1998), which is then followed by a comprehensive assessment to determine the underdeveloped awareness of rhyme.

A comprehensive description of SLI, in our region and in the neighboring countries, does not exist, at least not yet, although it is essential for the diagnostic and therapeutic process. Having in mind that the symptoms and manifestations of language variations are conditioned by language peculiarities, foreign research results are only partly applicable (Lenček, Blaži, & Ivšac, 2007). Since rhyme represents an important indicator of the phonological development and is one of the signs of SLI, which is associated with difficulties in reading and writing, our aim was to examine

the awareness of rhyme in preschool children with SLI and compare them with the children without language difficulties. In addition, we intended to contribute to a more comprehensive description of specific language impairment in our country and in the neighboring countries.

Methods

Bearing in mind that the development of phonological skills is a long process, which in a certain number of children gets disrupted, the focus of this study was on the comparison regarding the skills of recognition and production of rhyme between the SLI children and the TLD children, aged from 5.11 to 7 years.

The aim of this study was to determine, based on the rhyming skills in the children with SLI and the children without language difficulties, the form and nature of the disorder in the phonological development. We wanted to contribute to the overview of phonological skills and phonological deficits in the SLI children in comparison to those with TLD.

Research Instrument

Testing was conducted by using the subtests of identification and production of rhyme from the Test for evaluating reading and writing pre-skills – *PredČiP* (Kuvač-Kraljević & Lenček, 2012).

The test for evaluating reading and writing pre-skills (*PredČiP* test) is a triage test used to assess a child's linguistic readiness for acquiring the initial academic skills. The test consists of tasks for assessing phonology, phonologic memory, pragmatics, and visual perception. For the current purpose, we used its particular segment that covers the evaluation of the rhyme recognition and production skills. The task of evaluating the rhyme recognition and production skills was carried out by using 14 items of the *PredČiP* test - 7 items for the rhyme recognition and 7 items for the independent production of rhyme.

PredČiP test, in its tasks of evaluating the rhyme recognition and production skills, contains mainly the pairs of two-syllable phonological structures, i.e. pairs of two-syllable words that are easily recognizable and audibly perceptible, and only two three-syllable combinations set to make children realize that length is not a rhyming criterion. Each task has three examples for practice. A child is given examples designed to show the gist of rhyme.

In the rhyme recognition task, there are seven tasks to solve, each containing two words (e.g. waterfall-sink). There are four combinations that rhyme, and three combinations, i.e. pairs of words, which do not rhyme. The principle in arranging the tasks is to line them up from simple to complex, considering the number of syllables and the number of sounds in the given words. The sum of accurately recognized pairs that rhyme makes up the overall result achieved on this task. The theoretical range of results is from 0 to 7, with higher results representing a better rhyme recognition achievement.

Following the comprehension tasks, there are rhyme production assignments. The rhyme production is measured at the level of production. There are seven words that require a rhyme. Only one-syllable and two-syllable phonological structures are included in this task (e.g. bridge, pot). A child is also allowed to produce forms that rhyme, but have no meaning. The sum of accurately produced pairs that rhyme makes up the overall result achieved on this task. The theoretical range of results is from 0 to 7, with higher results representing a better achievement in the rhyme production.

The coefficient of internal reliability is calculated by Cronbach's alpha ($\alpha = 0.856$).

Sample

The research included 120 participants. There were 40 SLI children (8 females and 32 males), aged between 71 and 84 months (5.11–7 years of age), with a mean age of 77.9 months (SD = 4.47 months). They were recruited through the Institute for Psychophysiological Disorders and Speech Pathology "Prof. dr. Cvetko Brajović" in Belgrade, Serbia. The diagnosis of SLI was made by a qualified speech and language therapist who administered a battery of tests to confirm the diagnosis. These included:

1. Peabody Picture Vocabulary Test - PPVT-III-HR (Dunn et al., 2010).
2. Tests for speech and language (Kostić, Vladislavljević, & Popović, 1983).
3. Test for evaluating image description skills (Vasić, 1994).
4. Test for evaluating speech development – test definition (Vasić, 1994).
5. Children's grammar (Kostić, Vladislavljević, & Popović, 1983).

If a child deviates from what is considered the typical development in each of the above assessments, and the child has no neurological problems, no cognitive impairment (i.e. IQ is within normal range), and no hearing impairment, the child is given a diagnosis of SLI. The above assessments are not standardized, but they are used in Serbia in every speech and language therapy institution. Results of the SLI children included in the sample were significantly lower on the applied language tests than those of the TLD children.

In addition, the SLI children were administrated the Revised Weschler's Intelligence Scale for Children (RWISC), standardized on the Serbian population (Biro, 1997). Their full-scale IQ was confirmed by an educational psychologist to range from 85 to 110.

There was a control group of 80 children with the typical language development (TLD). There were 40 girls and 40 boys with an age range of 71 and 84 months and a mean age of 75.9 months (SD = 4.47 months). The control group children were recruited from the preschool institutions *Pametnica* and *Baby Palace* in Belgrade. The TLD children were also matched to the SLI group on gender and the full-scale IQ; their IQ was between 90 and 110. The control group children had no speech or language problems, and there was no concern about their language, motor or cognitive development.

Furthermore, the research confirmed the statistical relevance with a minor impact in relation to the age of participants ($t = 2.34$, $df = 118$, $p = 0.021$, $\eta^2 = 0.04$). The difference in the average age of the two groups equals two months (95% CI: 0.31–3.74). Intendedly, in our research, we tried to include the TLD children younger than the examined SLI children in order to show the significance of language delay in the SLI children. In relation to gender, we determined the statistical relevance with a minor impact of difference ($\chi^2 = 8.79$, $df = 1$, $p = 0.003$, $\phi = -0.29$). A larger number of boys in the group of SLI subjects is a result of random sampling, but also proves the higher occurrence of language disorders in boys. The differences in the occurrence of language disorders in relation to gender have been confirmed in numerous studies so far. Higher occurrence of SLI in males, compared to females, has been found in a ratio of 1.3:1 to 3:1 (Shriberg & Kwiatkowski, 1994; Shriberg et al., 1999; Tomblin et al., 1997). All the participants (SLI and TLD) were monolingual native speakers of Serbian.

Consent was obtained from the parents, as well as from the children themselves prior to their participation in the study.

Data Analysis

First, descriptive statistics was calculated, including absolute frequency, mean, median, standard deviation and interquartile range. In order to test the uniformity of the groups in relation to age, t-test for independent samples was used, whereas χ^2 test was used for the uniformity of the groups in relation to gender. Moreover, prior to all further statistical analyses, the Kolmogorov-Smirnov test was applied to test the data distribution normality. Since the data were not normally distributed, nonparametric statistical techniques were performed. The Mann-Whitney U-test was applied to examine the inter-group differences. The effect size was expressed by r coefficient. For all the statistical analysis, α level was set at 0.05. The data were analysed and processed by using the Statistical Package for Social Sciences for Windows (SPSS version 21.0).

Results

In the next section, we present a descriptive overview of the results and the comparison of achievements by the nonparametric Mann-Whitney U-test, as well as an overview of the distribution of the results for both groups on the Test for evaluating reading and writing pre-skills, i.e. its part that covers the rhyme recognition and production. Also shown are the differences in the achievements as related to either the absence or presence of specific language impairment.

The comparative overview of descriptive indicators regarding the rhyme recognition task achievements is presented in Table 1. According to the established values, the participants with the typical language development successfully discerned rhyme in a little over six of seven given tasks. In contrast, the SLI subjects, on average, were successful on three tasks, but with a greater dispersion of the results.

Table 1

Rhyme recognition: Descriptive measures of achievement on rhyme recognition tasks

	Group	Min	Max	<i>M</i>	<i>SD</i>
Rhyme recognition	SLI	0	7	3.38	2.71
	TLD	4	7	6.56	0.79

Note: SLI – specific language impairment; TLD – typical language development.

The results obtained by using the Man-Whitney U-test show that there were statistically significant differences of the median score at the level $p < 0.0005$ in the rhyme recognition skills (SLI, *Mdn* = 4.00, *IQR* = 6; TLD, *Mdn* = 7, *IQR* = 3; $U = 433.0$, $z = -7.05$, $p = 0.000$, $r = 0.642$). Size of the impact of this difference can be described as a difference of great intensity.

Table 2

Rhyme production: Descriptive measures of achievement at rhyme production tasks

	Group	Min	Max	<i>M</i>	<i>SD</i>
Rhyme production	SLI	0	7	1.70	2.16
	TLD	2	7	6.05	1.21

Note: SLI – specific language impairment; TLD – typical language development.

The comparative overview of descriptive indicators regarding the rhyme production task achievements is given in Table 2. According to the displayed values, the TLD participants successfully produced rhyme in a little over six out of seven given tasks. The SLI participants successfully completed almost two tasks on average, but with a greater dispersion of the results.

The results obtained by using the Mann-Whitney U-test show that there were statistically significant differences of the median score at the level $p < 0.0005$ in the rhyme production skills (SLI, *Mdn* = .00, *IQR* = 4; TLD, *Mdn* = 6.50, *IQR* = 2; $U = 196.5$, $z = -8.03$, $p = 0.000$, $r = 0.73$).

Table 3

Normality of distribution regarding achievements of SLI participants and TLD participants on Test for evaluating reading and writing pre-skills

Test for evaluating reading and writing pre-skills	Group	Sk	Ku	KS	Sig.
Rhyme recognition	SLI	-.14	-1.62	.20	.000
	TLD	-1.85	2.70	.42	.000
Rhyme production	SLI	.92	-.52	.31	.000
	TLD	-1.38	1.66	.28	.000

Note: SLI – specific language impairment; TLD – typical language development.

The actual form of distribution with reference to the results achieved on the rhyme recognition tasks in the group of SLI participants shows slight asymmetry toward negative values and provides a clear picture of the measured parameter, with an index of asymmetry $Sk = -.14$, which indicates the distribution of the results in the

group of SLI participants as stable low and poor, with the dominant value of $Mo = 0$ (without success on seven given tasks). In the group of TLD participants, the results are arranged asymmetrically to negative values ($Sk = -1.85$) indicating the presence of more "above average" results with a low dispersion ($SD = 0.79$) and the dominant value, i.e. maximum score of $Mo = 7$.

The distribution of the results achieved on the rhyme production tasks in the group of SLI participants shows slight asymmetry toward positive values, with an index of asymmetry $Sk = .92$, which indicates the distribution of the results in the group of SLI participants as stable low and poor, with the dominant value of $Mo = 0$ (without success on seven given tasks). In the group of TLD participants, the results are arranged asymmetrically to negative values ($Sk = -1.38$) indicating the presence of more "above average" results with a low dispersion ($SD = 1.22$) and the dominant value of $Mo = 7$.

Discussion

The results in our study indicated statistically significant differences at performing the tasks of rhyme recognition and production in the SLI children and TLD children. The children with SLI showed poorer performance on all tasks when compared to the children with TLD. The average success rate of the children with SLI was two to three tasks in a group of seven given tasks, while the children with TLD were far more successful, with the correct performance of over six tasks, on average.

Testing the rhyme recognition skills and poorer performance of the SLI children can be found in several studies (Bird, Bishop, & Freeman, 1995; Cardoso-Martins, 1994; Carroll & Snowling, 2001; Magnusson & Naucler, 1993). Bird et al. (1995) showed that the children with language-phonological difficulties performed significantly worse on the tasks of rhyme recognition, segmentation, and rhyme targeting, which was recorded in our study, as well. The authors also share their impression, which we often came across in our study as well, that many of the children with SLI had no idea of what the concept of rhyme is, and were, of course, unable to do what was expected of them, despite having been given clear instructions and practice (Bird et al., 1995).

Examining the skills of rhyming in the children with SLI, aged between 6.0 and 6.8 years, in the tasks of rhyme recognition and production, and comparing them with the skills of typical peers, significantly poorer performances were recorded, compared not only to their typical peers, but also in relation to a group of children of younger age, which indicates an extreme risk of the children with SLI for the occurrence of disabilities in learning reading and spelling (Joffe, 1998). Thatcher (2010), on a sample of 90 children (45 children with SLI and 45 children with TLD), aged 4.7 to 7.6 years, divided into three categories, also found significant differences and a large discrepancy in their rhyming skills.

Recent studies in the German speaking areas have shown some interesting results of the development and state of rhyming skills in the children of preschool age. They also

confirm the importance of the task selected for this particular research. The research conducted by Wagensveld and associates (2012) examined the TLD preschool children in order to determine whether the awareness of rhyme in its essence is analytical or global – it has been shown that this awareness is the combination of these two strategies that actually provides the adequate rhyme recognition. The current results showed that even the typical children of preschool age have extended latency during their recognition of non-words and their relation to rhyme, and words that do not rhyme.

Children's rhyme is practically a universal skill in the period of linguistic development. The existence of strong links between the rhyming development at the age of 3.3 years and the development of phonological skills in the following year is represented in numerous studies by Bryant and Bradley with associates (Bryant, Bradley, Maclean, & Crossland, 1989; Bryant, MacLean, Bradley, & Crossland, 1990; Goswami & Bryant, 1990). However, it has been known that such skills are related to learning how to read, the scientific result of which is a hypothesis that recognizing and understanding rhymes can affect children's reading. The hypothesis has been confirmed in the longitudinal studies of a group of 64 children, aged 3.4 to 6.3 years, showing a strong linkage between the rhyming skills and success in reading and spelling after three years of age, regardless of the social status, intellectual functioning, and phonological skills at the beginning of the research project. The reason for such a significant effect of developed rhyming skills is that it affects phonological sensitivity, which helps a child to learn how to read (Bryant et al., 1989). With these data in mind, we based our research on the children of preschool age. The obtained results pointed to significant difficulties in mastering rhyming skills in the SLI children. This finding suggests the possibility of the strenuous acquisition of reading and writing skills in the above category of children.

Conclusion

The aim of this study was to examine the awareness of rhyme in the SLI children of preschool age, and to compare them with the children without any language difficulties. Our results show that the children with SLI have considerable difficulties in acquiring rhyming skills. The difficulties are manifested in the field of rhyme recognition and production. This finding suggests the conclusion that the difficulties in mastering rhyming skills represent an integral part of SLI, which should be considered in the diagnosis. Bearing in mind that the elements of the rhyme awareness develop very early in children, and represent a developmental precursor of phoneme detection (Bryant et al., 1990; Laing & Espeland, 2005), which plays an important role in reading, the occurrence of rhyme awareness deficit in the preschool period may point to difficulties in mastering reading skills (Ivšac Pavliša, 2009). Therefore, the evaluation and development of rhyme in the children with SLI should be given special attention.

The role of awareness of rhyme in the later development of reading skills has caused much debate. Finally, we believe that rhyme represents an important segment

of phonological development and pre-reading skills. Establishing a clear connection between the difficulties in rhyme awareness and the difficulties in reading requires a longitudinal study, which can be a guideline for future research in this area.

References

- Bird, J., Bishop, D., & Freeman, N. (1995). Phonological awareness and literacy development in children with expressive phonological impairments. *Journal of Speech and Hearing Research*, 38, 446–462. <https://doi.org/10.1044/jshr.3802.446>
- Biro, M. (1997). *Priručnik za REVISK - Revidirana skala za merenje inteligencije dece po principima Wechslera*. Beograd: Savez društava psihologa Srbije.
- Blaži, D., & Banek, L. (1998). Posebne jezične teškoće-uzrok školskom neuspjehu?. *Hrvatska revija za rehabilitacijska istraživanja*, 34(2), 183-190.
- Bradley, L., & Bryant, P. E. (1983). Categorizing sounds and learning to read – a causal connection. *Nature*, 301, 419–421. <https://doi.org/10.1038/301419a0>
- Bryant, P. E., Bradley, L., Maclean, M., & Crossland, J. (1989). Nursery rhymes, phonological skills and reading. *Journal of Child Language*, 16(2), 407-428. <https://doi.org/10.1017/S0305000900010485>
- Bryant, P. E., MacLean, M., Bradley, L. L., & Crossland, J. (1990). Rhyme and alliteration, phoneme detection, and learning to read. *Developmental Psychology*, 26, 429-438. <https://doi.org/10.1037/0012-1649.26.3.429>
- Cardoso-Martins, C. (1994). Rhyme perception: Global or analytical? *Journal of Experimental Child Psychology*, 57, 26–41. <https://doi.org/10.1006/jecp.1994.1002>
- Carroll, J. M., & Snowling, M. J. (2001). The effects of global similarity between stimuli on children's judgment to rhyme and alliteration. *Appl. Psycholinguist*, 22, 327–342. <https://doi.org/10.1017/S0142716401003034>
- Chard, D. J., & Dickson, S. V. (1999). Phonological awareness: instructional and assessment guidelines. *Interv. Sch. Clin.*, 34, 261–270. <https://doi.org/10.1177/105345129903400502>
- Dunn, L. M., Dunn, L. M., Kovačević, M., Padovan, N., Hržica, G., Kuvač Kraljević, J., ..., & Palmović, M. (2010). *Peabody slikovni test rječnika, PPVT-IIIHR*. Zagreb: Naklada Slap.
- Elkonin, D. B. (1971). Development of speech. In A. V. Zaporozhets, & D. B. Elkonin (Eds.), *The psychology of preschool children*. Trans. by J. Shybut & S. Simon (pp. 111-185). Oxford, England: Massachusetts Inst. of Technology P.
- Garvey, C. (1977). Play with language and speech. In S. Ervin-Tripp, & E. Mitchell-Kernan (Eds.), *Child discourse*. New York: Academic Press.
- Goswami, U. (2002). In the beginning was the rhyme? A reflection on Hulme, Hatcher, Nation, Brown, Adams, and Stuart. *Journal of Experimental Child Psychology*, 82(1), 47-57.
- Goswami, U., & Bryant, P. (1990). *Phonological skills and learning to read*. East Sussex, UK: Lawrence Erlbaum Associates, Ltd.

- Hayes, R. A., Slater, A., & Brown, A. (2000). Infants' ability to categorise on the basis of rhyme. *Cognitive Development*, 15, 405–419. [https://doi.org/10.1016/S0885-2014\(01\)00036-3](https://doi.org/10.1016/S0885-2014(01)00036-3)
- Howell, J. (1989). *The metalinguistic awareness of phonologically disordered and normally developing children: a comparative study*. (Thesis/dissertation). Newcastle upon Tyne: University of Newcastle upon Tyne.
- Ivšac Pavliša, J. (2009). *Predvještine čitanja u djece s rizikom za teškoće učenja*. (Doctoral dissertation). Zagreb: Sveučilište u Zagrebu.
- Jakobson, R., & Waugh, L. (1979). *The Sound Shape of Language*. London: Bloomington.
- Joffe, V. L. (1998). Rhyming and related skills in children with specific language impairment. *Current Psychology of Cognition*, 17, 479-512.
- Kostić, Đ., Vladislavljević, S., & Popović, M. (1983). *Testovi za ispitivanje govora i jezika*. Beograd: Zavod za udžbenike i nastavna sredstva.
- Kuvač-Kraljević, J., & Lenček, M. (2012). *Test za procjenjivanje predvještina čitanja i pisanja*. Zagreb: Naklada Slap.
- Laing, S., & Espeland, W. (2005). Low intensity phonological awareness training in a preschool classroom for children with communication impairments. *Journal of Communication Disorders*, 38(1), 65–82. <https://doi.org/10.1016/j.jcomdis.2004.03.009>
- Lenček, M., Blažič, D., & Ivšac, J. (2007). Specifične teškoće učenja. *Magistra Iadertina*, 2(2), 107–119.
- Leonard, B. L. (1998). *Children with Specific Language Impairments*. Massachusetts: MIT Press.
- Magnusson, E., & Naucler, K. (1993). The development of linguistic awareness in language-disordered children. *First Language*, 13, 93–111. <https://doi.org/10.1177/014272379301303706>
- Milošević, N., & Vuković, M. (2011). Leksičko-semantičke sposobnosti dece sa specifičnim jezičkim poremećajem i nespecifičnim promenama elektroencefalografskih aktivnosti. *Specijalna edukacija i rehabilitacija*, 10(3), 435-443.
- Morais, J. (1991). Constraints on the development of phonemic awareness. In S. Brady, & D. Shankweiler (Eds.), *Phonological processes in literacy* (pp. 5–27). Hillsdale, NJ: Lawrence Erlbaum.
- Noordenbos, M. W., Segers, P. C. J., Wagensveld, B., & Verhoeven, L. T. W. (2013). Aberrant N400 responses to phonological overlap during rhyme judgements in children at risk for dyslexia. *Brain Research*, 1537, 233-243. <https://doi.org/10.1016/j.brainres.2013.09.018>
- Opie, I., & Opie, P. (1959). *The lore and language of school children*. Oxford: Clarendon Press.
- Schwartz, R. (2009). Specific Language Impairment. In R. Schwartz (Ed.), *Handbook of Child Language Disorders* (pp. 3–43). New York: Psychology Press.
- Thatcher, K. L. (2010). The development of phonological awareness with specific language-impaired and typical children. *Psychology in the Schools*, 47(5), 467-480. <https://doi.org/10.1002/pits.20483>
- van Kleeck, A., Gillam, R., & McFadden, T. (1998). A study of classroom-based phonological awareness training for preschoolers with speech and/or language disorders. *American Journal of Speech- Language Pathology*, 7, 65-76. <https://doi.org/10.1044/1058-0360.0703.65>

- Vandewalle, E., Boets, B., Ghesquière, P., & Zink, I. (2012). Auditory processing and speech perception in children with specific language impairment: Relations with oral language and literacy skills. *Research in Developmental Disabilities, 33*(2), 635-644. <https://doi.org/10.1016/j.ridd.2011.11.005>
- Vasić, S. (1994). *Psiholingvistika*. Beograd: Institut za pedagoška istraživanja.
- Vloedgraven, J. M., & Verhoeven, L. (2007). Screening of phonological awareness in the early elementary grades: An IRT approach. *Annals of Dyslexia, 57*, 33-50. <https://doi.org/10.1007/s11881-007-0001-2>
- Wagensveld, B., vanAlphen, P., Segers, E., & Verhoeven, L. (2012). The nature of rhyme processing in preliterate children. *Br.J. Educ.Psychol., 82*(4), 672-689. <https://doi.org/10.1111/j.2044-8279.2011.02055.x>

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Svjesnost rime u djece predškolske dobi s posebnim jezičnim teškoćama i bez jezičnih teškoća

Sažetak

Važnost razvoja raspoznavanja i proizvodnje rime prikazuje se definiranjem sposobnosti rimovanja kao jedne od aktivnosti koja daje osjećaj glasovne strukture riječi. To je prirodna aktivnost većine djece predškolske dobi, ali i česta teškoća za djecu s jezičnim teškoćama. Rima je vještina koja je povezana s razvojem čitanja i slovanja koja doprinosi kasnijem razvoju tih vještina neovisno o odnosu prema fonemskoj svijesti.

Cilj ove studije bio je usporedba vještine rimovanja kod djece s jezičnim teškoćama i bez jezičnih teškoća. Uzorak je činilo 120 ispitanika koji su ispitani suptestom raspoznavanja i proizvodnje rime.

Rezultati istraživanja ukazuju na statistički značajne razlike na zadacima raspoznavanja i proizvodnje rime u djece s posebnim jezičnim teškoćama (PJT) i djece tipičnog jezičnog razvoja. Djeca s posebnim jezičnim teškoćama imala su značajno lošija postignuća na svim zadacima u odnosu na djecu tipičnog jezičnog razvoja.

Zaključeno je da se u razvojnom razdoblju svijest o rimi može promatrati kao preduvjet javljanja manjih fonoloških jedinica poput fonemske svijesti i da su one indikator kasnijeg razvoja vještine čitanja. Posebnu pažnju treba im posvetiti u praćenju razvoja djece s jezičnim teškoćama.

Ključne riječi: posebne jezične teškoće; svijest o rimi; tipičan jezični razvoj.

Uvod

Rima predstavlja glasovno podudaranje slogova na krajevima dviju ili više riječi. Zapažanja vještine spontane proizvodnje rime na ranom uzrastu dovela su do opsežnijih istraživanja proizvodnje i raspoznavanja rime i shvaćanja rime kao važne metalingvističke sposobnosti. Smatra se da je rima prvi indikator fonološkog razvoja jer predstavlja aktivnost koja povećava senzitivnost djeteta na glasovnu strukturu riječi pa je to prirodna aktivnost brojne djece predškolske dobi (van Kleeck, Gillam, i McFadden, 1998).

Svjesnost o rimi najraniji je pokazatelj razvijene forme fonološke svijesti (Vloedgraven i Verhoeven, 2007). Prve spontane proizvodnje rime kao dio dječje igre pokazuju se na uzrastu oko 18. mjeseca, a njihov se vrhunac očituje u uzrastu između 2. i 3. godine života (Howell, 1989). Odavno se smatra da su aktivnosti proizvodnje rime u uzrastu od 18 mjeseci univerzalne sposobnosti jezičnog razvoja u djece i da predstavljaju početnu fazu razvoja fonološke svjesnosti (Opie i Opie, 1959). Korijen je fonološke svjesnosti u stvaranju neuralnog pritiska na reorganizaciju fonološkog leksikona- Kao što se sve više stječu zvučno slične riječi, onda je uloga svijesti o rimi vrlo jasna u fonološkom razvoju (Goswami, 2002).

Univerzalno postojanje rime u djece objašnjava se činjenicom da je u proizvodnji i „igranju” s poznatim i nepoznatim riječima govorna pažnja usmjerena na zvuke jezika znatno više nego na semantičku i gramatičku komponentu. U toku nizanja rima, dijete manipulira poznatom riječi tako da ona zadržava neke elemente prethodne riječi te se obrazac minimalnih promjena ustaljuje i razvija. Sposobnost fokusiranja na formu, a ne na značenje riječi, utječe na daljnji razvoj fonološke vještine (Jakobson i Waugh, 1979).

Zaslужnost proizvodnje rime za unapređenje razvoja fonoloških vještina ogleda se putem njihove oslobođenosti od ostalih lingvističkih stajališta, posebno od semantičkih i gramatičkih karakteristika. Jakobson i Waugh (1979) navode da je stvaranje rime s riječima sa značenjem ili bez značenja usmjereno samo na fonetske karakteristike jezika.

Pojava proizvodnje i raspoznavanje rime na ranom uzrastu povezuje se s ritmičkim aktivnostima koje prate fizičku aktivnost. Nekada su upravo rime pokretač ritmičke fizičke aktivnosti koja se nastavlja i u vremenu kada je proizvodnja rime završena (Garvey, 1977; Howell, 1989).

Uloga rime ima važno mjesto u razvoju jezičnih vještina. Smatra se da igranje sa zvucima jezika omogućuje usvajanje „zvučnog oblika riječi” i da se jezik upravo uči putem te aktivnosti (Elkonin, 1971; Howell, 1989). Uz to, putem ritmičke aktivnosti dijete otkriva da se jezične jedinice mogu kombinirati i da za to postoje posebna pravila.

Još uvijek nije razjašnjeno zašto neka djeca u doba ranog uzrasta mogu uspješno prepoznati par riječi koji se rimuje (stolica-polica), ali ne i otkriti parove koji se ne rimuju (bal-bol) ako je njihova razlika fonetski minimalna (Cardoso-Martins, 1994; Carroll i Snowling, 2001; Wagensveld, van Alphen, Segers i Verhoeven, 2012). Za sada se taj takozvani „globalno sličan učinak” objašnjava dječjim holističkim pristupom leksičkim reprezentacijama i akustičkim sličnostima u fonološkim obrascima (Carroll i Snowling, 2001; Hayes, Slater, i Brown, 2009; Noordenbos, Segers, Wagensveld, i Verhoeven, 2013).

Doživljaj vještine rimovanja u ranom uzrastu kao spontane aktivnosti bez komunikativne funkcije (Garvey, 1977; Howell, 1989) omogućava da dijete poslije

postane svjesno manjih i zasebnih jezičnih jedinica. Vještina da se prepozna obrazac rime na materinskom jeziku može se promatrati kao važan čimbenik u razvoju rane pismenosti. Pokazalo se da većina djece ovlada osnovnim vještinama rimovanja prije nego što pristupi procesu učenja čitanja (Bradley i Bryant, 1983; Chard i Dickson, 1999).

Važnost razvoja svjesnosti rime u daljnjem razvoju fonoloških vještina, neophodnih za ovladavanje vještinama čitanja i pisanja, prikazali su Bradley i Bryant još 1983. godine. Oni su pokazali da je svijest o rimi mjerena u predškolskoj dobi značajan pokazatelj kasnijeg napretka u slovkanju i čitanju (Bradley i Bryant, 1983). U znanstvenoj literaturi prisutne su kontroverze o izravnoj vezi vještine rimovanja i fonemske svijesti (Goswami i Bryant, 1990; Morais, 1991). No iako postoje sugestije da raspoznavanje rime ne može biti dio kontinuiteta fonemske svijesti, ipak se vjeruje da je vještina raspoznavanja i proizvodnje rime vrijedna aktivnost dječje senzitivnosti na glasovnu strukturu riječi (van Kleeck, Gillam, i McFadden, 1998).

Posebne jezične teškoće (PJT) jest izraz (eng. Specific language impairment) kojim se definira poremećaj u razvoju jezika koji nije uvjetovan oštećenjem sluha, sniženim intelektualnim sposobnostima, cerebralnom patologijom, emocionalnim poremećajima ili teškom socijalnom deprivacijom (Leonard, 1998; Schwartz, 2009; Vandewalle, Boets, Ghesquière, i Zink, 2012). U djece s posebnim jezičnim teškoćama dolazi do značajnog kašnjenja i teškoća u razvoju pojedinih elemenata jezične strukture (Milošević i Vuković, 2011). Jezične teškoće kod te djece mogu biti očitovane u veoma različitim stupnjevima težine, od vrlo teškog do vrlo blagog. S obzirom na te varijacije nekada se tek polaskom u školu i nastajanjem teškoća u učenju, čitanju i pisanju utvrđuje da dijete ima PJT (Blaži i Banek, 1998), a cjelovitom procjenom utvrđuje se i nerazvijena svijest o rimi.

Sveobuhvatan opis PJT, na našem prostoru i u zemljama u okruženju, za sada ne postoji iako je nužan za dijagnostički i terapijski postupak. Kako su simptomi i manifestacije jezičnih odstupanja uvjetovani jezičnim osobitostima, rezultati stranih istraživanja samo su djelomično primjenjivi (Lenček, Blaži, i Ivšac, 2007). Budući da rima predstavlja značajan indikator fonološkog razvoja i jedan je od znakova PJT koje se povezuju s teškoćama u čitanju i pisanju, cilj nam je bio ispitati svjesnost rime u djece s PJT predškolske dobi i dobivene rezultate usporediti s djecom bez jezičnih teškoća. Namjera nam je, osim toga, bila doprinijeti obuhvatnijem opisu posebnih jezičnih teškoća u našoj sredini i u zemljama u okruženju.

Metode

Imajući u vidu kako razvoj fonoloških vještina predstavlja dug proces koji kod jednog broja djece biva narušen, predmet je ovog istraživanja usporedba vještina raspoznavanja i proizvodnje rime između djece s PJT i djece tipičnog jezičnog razvoja (TJR) na uzrastu od 5,11 do 7 godina.

Cilj istraživanja bio je na osnovi usporedbe vještine rimovanja u djece s posebnim jezičnim teškoćama i djece bez jezičnih teškoća utvrditi obrazac i prirodu poremećaja u fonološkom razvoju. Željeli smo doprinijeti pregledu fonoloških vještina i fonoloških nedostataka u djece sa PJT u odnosu na djecu s TJR.

Instrument istraživanja

Ispitivanje je bilo provedeno primjenom supтеста raspoznavanja i proizvodnje rime iz Testa za procjenjivanje predvještina čitanja i pisanja – PredČip (Kuvač-Kraljević i Lenček, 2012).

Test za procjenjivanje predvještina čitanja i pisanja (PredČip test) trijažni je test za procjenjivanje djetetove jezične spremnosti za ovladavanje početnim školskim vještinama. Test se sastoji od zadataka za procjenjivanje fonologije, fonološkog pamćenja, pragmatike i vizualne percepcije. Za potrebe ovog istraživanja upotrebljavan je dio testa koji obuhvaća ispitivanje vještina raspoznavanje i proizvodnje rime. Zadatak mjerenja vještina raspoznavanja i proizvodnje rime ispunjavao se primjenom 14 čestica PredČIP testa – 7 čestica za raspoznavanje rime i 7 čestica za samostalnu proizvodnju rime.

PredČip test u zadatcima raspoznavanja i proizvodnje rime sadrži uglavnom parove dvosložnih fonoloških struktura, odnosno parove dvosložnih riječi koje su lako prepoznatljive i slušno uočljive te svega dvije trosložne kombinacije postavljene kako bi djeca spoznala da duljina nije kriterij za rimovanje. Svaki zadatak ima tri primjera za vježbu. Djetetu se daju primjeri kojima se nastojala pokazati bit rime.

U zadatku raspoznavanja rime sedam je zadataka za rješavanje, a svaki sadrži po dvije riječi (npr. soba-roba; vodopad-sudoper). Četiri se kombinacije rimuju, a tri se kombinacije odnosno para riječi ne rimuju. U poretku zadataka slijedi se princip od jednostavnijih prema složenijima, i to s obzirom na broj slogova i broj glasova u zadanim riječima. Zbroj točno prepoznatih parova koji se rimuju čini ukupno postignuće na tom zadatku. Teorijski raspon rezultata je od 0 do 7 pri čemu viši rezultat predstavlja bolje performanse u prepoznavanju rime.

Nakon zadataka razumijevanja slijedili su zadatci proizvodnje rime. Proizvodnja rime mjerena je na razini proizvodnje. Sedam je riječi za koje je bilo potrebno pronaći rimu. Uključene su samo riječi jednosložne i dvosložne fonološke strukture (npr. most, lonac). Dijete je moglo proizvoditi i oblike koji se rimuju, ali nemaju značenje. Zbroj točno proizvedenih parova koji se rimuju čini ukupno postignuće na ovom zadatku. Teorijski raspon rezultata je od 0 do 7 pri čemu viši rezultat predstavlja bolje performanse u proizvodnji rime.

Koeficijent unutarnje pouzdanosti izračunat je Cronbachovom alfaom ($r = 0,856$).

Uzorak

Istraživanjem je obuhvaćeno 120 ispitanika: 40 djece s posebnim jezičnim teškoćama (PJT) (8 ženskih i 32 muških), u dobi između 71 mjeseca i 84 mjeseca (5; 11-7 godina

starosti) s prosječnom dobi od 77,9 mjeseci (SD 4,47 mjeseca). Oni su bili poslani iz Zavoda za psihofiziološke poremećaje i govornu patologiju "Prof. dr. Cvetko Brajović" u Beogradu, Srbija. Dijagnoza PJT postavljena je od kvalificiranih logopeda koji su sačinili bateriju testova kako bi potvrdili dijagnozu. Uključivali su:

1. Peabody slikovni test rječnika - (Dunn i sur., 2010) PPVT-III-HR.
2. Ispitivanje govora i jezika (Kostić, Vladislavljević, i Popović, 1983).
3. Test za procjenu vještine opisa slike (Vasić, 1994).
4. Test za procjenu razvoja govora - test definicija (Vasić, 1994).
5. Dječija gramatika (Kostić, Vladislavljević i Popović, 1983).

Ako je dijete odstupalo od onoga što se smatra tipičnim razvojem u svim navedenim procjenama, i ako dijete nije imalo neuroloških problema, kognitivnih oštećenja (tj. IQ je u granicama normale), kao ni oštećenje sluha, dana je dijagnoza PJT. Navedeni testovi nisu standardizirani, ali se primjenjuju u Srbiji u svim ustanovama za govornu i jezičnu terapiju. Djeca s jezičnim teškoćama koja su uključena u uzorak postizala su značajno lošije rezultate od TJR na primijenjenim jezičnim testovima.

Osim toga, na djeci sa PJT primijenjen je revidiran Wechslerov test inteligencije za djecu (REVISK) koji je normiran na srpskom stanovništvu (Biro, 1997). Njihov IQ bio je između 85 i 110, a potvrđen je od educiranog psihologa.

Kontrolna skupina imala je 80 djece s tipičnim jezičnim razvojem (TJR): 40 djevojčica i 40 dječaka u dobnoj skupini od 71 mjeseca i 84 mjeseci, s prosječnom dobi od 75,9 mjeseci (SD = 4,47 mjeseci). Djeca iz kontrolne skupine pozvana su iz Ustanova za odgoj i obrazovanje "Pametnica" i "Baby Palace" u Beogradu. Djeca s TJR također su se podudarala s PJT skupinom u spolu i IQ; njihov IQ bio je između 90 i 110. Djeca u kontrolnoj skupini nisu imala govorne ili jezične probleme, niti je ikada zabilježen problem u njihovu jezičnom, motoričkom ili kognitivnom razvoju.

Također, potvrđena je i statistička značajnost malog utjecaja u odnosu na uzrast ispitanika ($t = 2,34$, $df = 118$, $p = 0,021$, $\eta^2 = 0,04$). Razlika između srednjih vrijednosti uzrasta po grupama iznosi dva mjeseca (95% CI: 0,31–3,74). Tendenciozno smo pokušali u istraživanje uključiti mlađu djecu s tipičnim jezičnim razvojem u odnosu na ispitivanu djecu s posebnim jezičnim teškoćama, želeći pokazati značajnost jezičnog kašnjenja djece s PJT.

U odnosu na spol utvrđena je statistička značajnost s malim utjecajem razlike ($\chi^2 = 8,79$, $df = 1$, $p = 0,003$, $\phi = -0,29$). Veći broj dječaka u grupi ispitanika s PJT rezultat je slučajnog odabira uzorka, ali i veće učestalosti jezičnih poremećaja u dječaka.

Razlike u prisustvu jezičnog poremećaja u odnosu na spol potvrđene su u brojnim studijama. Veća učestalost posebnih jezičnih teškoća kod muškog spola u odnosu na ženski spol nađena je u odnosu od 1,3:1 do 3:1 (Shriberg i Kwiatkowski, 1994; Shriberg i sur., 1999; Tomblin i sur. 1997).

Svi sudionici (PJT i TJR) jednojezični su izvorni govornici srpskog jezika.

Suglasnost je dobivena od roditelja, kao i od same djece prije njihova sudjelovanja u istraživanju.

Analiza podataka

Najprije je izračunata deskriptivna statistika, koja je obuhvaćala apsolutnu frekvenciju, srednju vrijednost, medijan, standardnu devijaciju i interkvartilni raspon. Kako bi se testirala ujednačenost skupine u odnosu na dob, koristio se t-test za nezavisne uzorke, a χ^2 test se koristio za ujednačenost skupina u odnosu na spol. Daljnjom statističkom analizom izveden je Kolmogorov-Smirnov test kako bi se testirala normalnost distribucije podataka. Budući da podatci nisu normalno distribuirani, izvedene su neparametrijske statističke tehnike. Mann-Whitney U-test primijenjen je kako bi se ispitala razlika između grupa. Veličina učinka izražena je koeficijentom *r*. Za sve statističke analize α razina postavljena je na 0,05. Analiza i obrada podataka provedene su s pomoću statističkog paketa za društvene znanosti za Windows (SPSS verzija 21.0).

Rezultati

U sljedećem dijelu bit će predstavljen deskriptivni prikaz rezultata i usporedba postignuća neparametrijskim Mann-Whitneyevim U-testom, kao i prikaz distribucije rezultata za obje grupe ispitanika na Testu za procjenjivanje predvještina čitanja i pisanja koji obuhvaća dio ispitivanja raspoznavanja i proizvodnje rime. Također, prikazane su i razlike u postignućima u odnosu na odsustvo ili prisustvo posebnih jezičnih teškoća.

Tablica 1

Usporedni prikaz deskriptivnih pokazatelja postignuća ispitanika na zadacima prepoznavanja rime predstavljen je u Tablici 1. Prema utvrđenim vrijednostima ispitanici TJR uspješno prepoznaju rimu u nešto više od šest od sedam ponuđenih zadataka. Nasuprot tome, ispitanici s PJT prosječno su bili uspješni u tri zadatka, ali s većom disperzijom rezultata.

Rezultati dobiveni primjenom Mann-Whitneyeva U-testa pokazuju da postoje statistički značajne razlike medijana rezultata na razini $p < 0,0005$ u vještini raspoznavanja rime (SJP, Mdn=4,00, IQR=6; TJR, Mdn=7, IQR=3; $U=433,0$, $z=-7,05$, $p=0,000$, $r=0,642$). Veličina utjecaja te razlike može se opisati kao razlika velikog intenziteta.

Tablica 2

Usporedni prikaz deskriptivnih pokazatelja postignuća ispitanika na zadacima proizvodnje rime dan je u Tablici 2. Prema prikazanim vrijednostima ispitanici TJR uspješno proizvode rimu u nešto više od šest od sedam ponuđenih zadataka. Ispitanici s posebnim jezičnim teškoćama prosječno su bili uspješni na gotovo dva zadatka, ali s većom disperzijom rezultata.

Rezultati dobiveni primjenom Mann-Whitneyeva U-testa ukazuju da postoje statistički značajne razlike medijana skora na nivou $p < 0,0005$ u vještini proizvodnje rime (SJP, Mdn=,00, IQR=4; TJR, Mdn=6,50, IQR=2; $U=196,5$, $z=-8,03$, $p=0,000$, $r = 0,73$).

Tablica 3

Stvaran oblik raspodjele rezultata na zadatcima prepoznavanja rime u grupi ispitanika s PJT pokazuje da je blago asimetrična prema negativnoj vrijednosti i daje jasnu sliku mjerenog pokazatelja s indeksom asimetrije $Sk=-,14$, što ukazuje na činjenicu da je distribucija rezultata u grupi ispitanika s PJT stabilno niska i loša s dominantnom vrijednošću od $Mo=0$ (bez uspjeha na sedam ponuđenih zadataka). U grupi ispitanika s TJR rezultati su raspoređeni asimetrično prema negativnoj vrijednosti ($Sk=-1,85$), što ukazuje na prisustvo više „iznadprosječnih” rezultata s niskom disperzijom ($SD=0,79$) i dominantnom vrijednošću odnosno maksimalnim rezultatom od $Mo=7$.

Distribucija rezultata na zadatcima proizvodnje rime u grupi ispitanika s PJT raspoređena je blago asimetrično prema pozitivnoj vrijednosti s indeksom asimetrije $Sk=,92$, što ukazuje na činjenicu da je distribucija rezultata u grupi ispitanika s PJT stabilno niska i loša s dominantnom vrijednošću od $Mo=0$ (bez uspjeha na sedam ponuđenih zadataka). U grupi ispitanika s TJR rezultati su raspoređeni asimetrično prema negativnoj vrijednosti ($Sk=-1,38$), što ukazuje na prisustvo više „iznadprosječnih” rezultata s niskom disperzijom ($SD=1,22$) i dominantnom vrijednošću od $Mo=7$.

Rasprava

Rezultati našeg istraživanja ukazuju na statistički značajne razlike na zadatcima raspoznavanja i proizvodnje rime u djece s PJT i djece TJR. Djeca s PJT imala su lošija postignuća na svim zadatcima u odnosu na decu s TJR. Prosječna uspješnost djece s PJT bila je dva do tri zadatka u grupi od sedam ponuđenih zadataka, a djeca s TJR bila su daleko uspješnija s točnim izvršenjem prosječno više od šest zadataka.

Ispitivanje vještine raspoznavanja rime i lošija postignuća djece s PJT pronašli smo u nekoliko studija (Bird, Bishop, i Freeman, 1995; Cardoso-Martins, 1994; Carroll i Snowling, 2001; Magnusson i Naucler, 1993). Bird sa suradnicima (1995) pokazuje da su djeca s jezičnim - fonološkim teškoćama značajno lošija na zadatcima raspoznavanja rime, segmentiranja i pogađanja rime, što je zabilježeno i u našem istraživanju. Autori navode i svoj dojam koji smo, također, često sretali u našem istraživanju, a to je da brojna ispitana djece s PJT nisu imala ideju što podrazumijeva koncept rime, i naravno, nisu mogla napraviti što se od njih tražilo, uprkos davanju jasnih uputa i vježbanju (Bird i sur., 1995).

Ispitujući vještinu rimovanja djece s PJT uzrasta između 6,0 i 6,8 godina na zadatcima prepoznavanja i proizvodnje rime i upoređujući ih s vještinama tipičnih vršnjaka, primjećuju se značajno lošija postignuća u odnosu na ne samo tipične vršnjake već i u odnosu na grupu mlađeg uzrasta, čime se ukazuje na izniman rizik djece s PJT za pojavu smetnji u učenju čitanja i slovkanja (Joffe, 1998). Thatcher (2010) je na uzorku od 90 djece (45 djece s PJT i 45 djece tipičnog razvoja), starosti od 4,7 do

7,6 godina, podijeljenog u tri kategorije, također našla značajne razlike i veliki nesklad u vještinama rimovanja.

Novija istraživanja na njemačkom govornom području pokazuju zanimljive rezultate razvoja i stanja vještine rimovanja u djece predškolske dobi. Također, potvrđuju značaj odabranog zadatka ovog istraživanja. Istraživanje koje je provela Wagensveld sa suradnicima (Wagensveld i sur., 2012) ispitujući djecu TJR predškolske dobi, s ciljem utvrđivanja je li svijest o rimi u biti analitička ili globalna – pokazalo se da je kombinacija tih dviju strategija zapravo uvjet odgovarajućeg raspoznavanja rime. Rezultati navedenog istraživanja pokazuju da čak i tipična djeca predškolske dobi imaju produženu latencu tijekom raspoznavanje ne riječi i njihova odnosa rime, kao i riječi koje se ne rimuju.

Dječja rima je praktično univerzalna vještina razvojnog jezičnog razdoblja. Postojanost jake veze između razvoja rime na uzrastu od 3,3 godine i razvoja fonoloških vještina u idućoj godini predstavljena je u brojnim istraživanjima Brayanta i Bradleya sa suradnicima (Bryant, Bradley, Maclean, i Crossland, 1989; Bryant, Maclean, Bradley, i Crossland, 1990; Goswami, i Bryant, 1990). Međutim, poznato je da su takve vještine povezane s učenjem čitanja, a čiji je znanstveni rezultat postavljanje hipoteze da poznavanje i razumijevanje rime može utjecati na čitanje u djece. Hipoteza je potvrđena u longitudinalnim istraživanjima grupe od 64 djece starosti od 3,4 do 6,3 godina koja su pokazala jaku povezanost između vještina rimovanja i uspjeha u čitanju i slovanju nakon treće godine, bez obzira na socijalni status, intelektualno funkcioniranje i fonološke vještine na početku istraživačkog projekta. Razlog tako značajnog učinka razvijene vještine rimovanja jesu taj da utječe na fonološku senzitivnost koja pomaže djetetu da uči čitati (Bryant i sur., 1989). Polazeći od tih podataka, istraživanje smo proveli upravo na djeci predškolske dobi. Rezultati naše studije upozoravaju na značajne teškoće u ovladavanju vještinom rime u djece s PJT. Ovakav nalaz sugerira na mogućnost otežanog ovladavanja vještom čitanja i pisanja kod navedene kategorije djece.

Zaključak

Cilj ovog rada bio je ispitati svjesnost o rimi u djece s PJT predškolske dobi i dobivene rezultate usporediti s rezultatima djece bez jezičnih teškoća. Naši rezultati pokazuju da djeca sa PJT imaju značajne teškoće u ovladavanju vještinom rimovanja. Teškoće se pokazuju u području prepoznavanja i produkcije rime. Takav pokazatelj sugerira zaključak da teškoće u ovladavanju vještinom rime predstavljaju sastavni dio PJT, što treba imati u vidu prilikom dijagnosticiranja. Imajući u vidu da se elementi u razvoju svjesnosti o rimi u djece javljaju veoma rano i da predstavljaju razvojni prekurzor fonemske detekcije (Bryant i sur., 1990; Laing i Espeland, 2005), a koja ima značajnu ulogu u čitanju, pojava deficita svjesnosti o rimi u predškolskoj dobi može predstavljati znak otežanog ovladavanja vještinama čitanja (Ivšac Pavliša, 2009). Stoga procjeni i razvoju rime u djece s PJT treba posvetiti posebnu pažnju.

Uloga svjesnosti o rimi u kasnijem razvoju vještine čitanja izazivala je velike rasprave. Najzad, mišljenja smo da rima predstavlja važan dio fonološkog razvoja i predčitalačkih vještina. Utvrđivanje jasne povezanosti teškoća svjesnosti o rimi i teškoća u čitanju zahtijeva longitudinalnu studiju, što može biti smjernica za buduća istraživanja u tom području.