

*Original article*

## Lexical-semantic abilities of five-to-six-year-old children

Ana Jegdić<sup>1</sup>, Mile Vuković<sup>2</sup>

<sup>1</sup>Education Center Novaković,  
Kragujevac, Serbia

<sup>2</sup>University of Belgrade, Faculty  
of Special Education and  
Rehabilitation, Belgrade, Serbia

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### Corresponding author:

Ana Jegdić, MD  
Lepenički bulevar 27,  
34 000 Kragujevac  
anajegdic@yahoo.com

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### Summary

**Introduction.** The development of the semantic level of the language system begins at the end of the first year of life, when a child begins to use the first words. During childhood, the child gradually increases his/her vocabulary and learns semantic characteristics. The main aim of this paper is to determine the lexical-semantic abilities of preschool children.

**Methods.** The sample included 50 children of both sexes, aged five to six years. According to age, the respondents were divided into two groups. The first group consisted of five-year-olds, and the second of six-year-olds. The Semantic Test and the Free Word Association Test were used in the research. The semantic test assessed the development of the following categories of words: homonyms, antonyms, synonyms, and metonyms. The free word association test was used to assess the types of responses after a given stimulus word.

**Results.** The results showed that six-year-olds had higher average values compared to five-year-olds on the total score, as well as on individual lexical categories of the Semantic Test. It was also shown that five-year-old girls had higher average values compared to boys of the same age on the Semantic Test. No statistically significant differences were found between five- and six-year-olds in terms of the representation of certain types of answers on the Free Word Association Test. As for sex, it was shown that on the Free Word Association Test, girls had statistically significantly higher number of missing answers compared to boys.

**Conclusion.** It was concluded that the lexical-semantic abilities of preschool children depended on their age, and that there was certain regularity in the development of the semantic features of words and the lexical-semantic structure.

**Keywords:** lexicon, semantics, children

## Introduction

The appearance and use of the first word is the most noticeable sign of language acquisition in early childhood. At the same time, it represents the beginning of the development of the lexical-semantic level of the language system [1, 2]. With age, the child with typical language development gradually increases the number of words in his/her vocabulary, stores them in semantic memory and accesses them during various language activities (spontaneous speech,

naming and retelling). Language acquisition implies the acquisition of several language components: phonological composition (voices and intonation), morphological changes of words, and syntactic structure of sentences. The acquisition of speech and language begins with a phonological cry and spontaneous vocalization, followed by the stages of cooing, vocalization, and babbling, normally characterizing the prelingual development period. With the appearance of the first word, the linguistic phase begins, within which the appearance of simpler and then more complex linguistic elements is first observed (correct use of grammatical forms, increase in the scope and diversity of the lexicon) [2, 3].

During semantic development, language content is joined to language expression. In other words, the child begins to understand that words have different meanings. The characteristics of the first meanings of words can be narrowed and expanded. In the beginning, the meaning of words is narrowed, so that children can convey significantly fewer meanings in relation to the number of meanings possessed by the recipient of the message. On the other hand, when the extended meaning of the word appears, excessive generalization occurs, so that one meaning includes some words that do not have such meanings in the language of adults [3, 4, 5].

Data from the literature show that children of typical language development of different chronological ages have different levels of lexical-semantic abilities. For example, at the age of 18 months, the child produces about 50 words, while between the ages of 19 and 24 months, the child uses about 200–250 words. During the third year, there is a significant increase in the volume and variety of the vocabulary: the child uses from 500 to 1,000 words, and at the age of four, the child has the vocabulary of about 1,500 words. At the age of five, the child uses between 1,800 and 2,200 words, while at the age of six and seven, the child uses between 2,500 and 3,000

words [1]. Characteristically, most children have significantly more developed receptive than expressive vocabulary [2]. It is also characteristic that by the time the child with typical development starts school, he/she masters an extensive vocabulary, which enables him/her to form the variety of syntactic constructions [6].

A word represents an independent and complete linguistic unit, created in a conventional combination of sound and meaning, in such a way that certain phonemes or combinations of phonemes are associated with a specific and proportionally constant conceptual content [7]. The child with typical language development becomes capable of labeling certain concepts and talking about objects that are not present already at the end of the second year. This appearance in speech is often considered the first stage in language development. Although the child masters a large number of words and their semantic features by the time he/she starts school, it should be borne in mind that the expansion of semantic competence takes place during the early school years. In other words, at school age, the establishment of homonymous, synonymous, antonymous, subordinate, and superior conceptual relationships is observed [6, 8].

Given that the level of vocabulary acquisition and knowledge of the semantic characteristics of words are important indicators of language development, the subject of this paper was the examination of lexical-semantic abilities in children aged five and six. Our intention is to contribute to the understanding of the characteristics of the lexical-semantic structure of children with typical language development, in order to facilitate the recognition of disorders in language development.

The main goal of this research was to determine the lexical-semantic abilities of children aged five to six years. Also, we were interested in the relationship between age and sexes and the level of development of the lexical-semantic structure.

## Method

The sample included 50 children of both sexes, aged five to six years. The sample consisted of 25 female respondents (50%) and 25 male respondents (50%). The respondents were divided into two age groups, of which the first group consisted of five-year-olds, and the second group consisted of six-year-olds. Children with typical intellectual and speech-language abilities without sensory impairments and/or neurological disorders were included in the research.

The following tests were used in the research:

- Semantic test [3] and Test of free word associations [9]. The semantic test containing 40 words, divided into four lexical categories: 1. Homonyms; 2. Antonyms; 3. Synonyms; 4. Metonyms. Each lexical category containing 10 stimulus words. In the category of homonyms, the respondent's ability to discover multiple meanings of one word (table, leaf, etc.) was evaluated. In the category of antonyms, the respondent was asked to say the word with the opposite meaning of the given stimulus word (life, health, happiness, etc.). In the category of synonyms, the respondent was asked to find different words expressing the same meaning (garden, room, home, etc.). In the fourth category (metonyms), the respondent's ability to understand the conveyed meaning of words (snail, gold, rabbit, etc.) was assessed. For each correct answer, the respondent got one point. If the respondent found more than one word for the given word, the correct answers for that word were added together. Only in the category of antonyms answers were formed by adding negation which was scored 0.5 points, because they represented a form of development phase in the adoption of this meaning relationship. By adding up the correct answers for each lexical category, it was determined whether the use of the specified category corresponded to the age or it was below the norm for the respondent's calendar age. Then the number of correct answers on all lexical categories was added up representing the total score on the Semantic test [3, 8, 10].
- The free word association test [9] consisting of 34 stimuli was conducted by asking respondents to say one word for each target word. The first word coming to respondents' mind as the response was recorded and then classified into the following categories: *no response*, *echolalic responses*: when the respondent repeated the given word. That meant the response was identical to the stimulus word. The respondents did not understand the meaning of the given word; instead, they only recognized it in its form and mimicked it; *neologism*- When respondents, in their responses, used a made-up word. They were then asked to explain that word to determine if it held any meaning for respondents or if it was a falsely learned word; *non-stimulus response* - When respondents, in front of the given word, pronounced a prefix indicating negation such as "ne" or "nije". For example, for the word "ali," the respondent answered "neali." That indicated that respondents still struggled to find the appropriate response at a representational level, even if they understood the linguistic structure and occurrence at that level. Responses that were grammatically correct, for example for the word "voli" the respondent answered "ne voli" did not fall into the category of infantile responses; *derived response* - When respondents based their responses on the acoustic structure of the word stimulus and built upon it their answers. That type of imitation relied on the sound-speech basis (*crn-crnac, sladak-sladoled, ah-dah*); *contextual responses* - When respondents, upon hearing the given word, named objects or events from their surroundings (e.g., for the word "butterfly", the respondent hearing a car siren gave answer "car"). That indicated that

sensorimotor schemes still dominated the individual's relationship to reality; *phrase responses* - When respondents answered the given word with a sentence. Respondents used the representational level, but their responses to the word stimuli was within the framework of personal needs and feelings, and *paradigmatic responses* - Paradigmatic responses were answers given by respondents with developed logical thinking and harmonious cognitive organization. Their responses to the given word indicate that linguistic development follows the maturity of cognitive organization, namely intelligence, emotions, and thinking. This level cannot be achieved by respondents who have certain forms of dyscognition or underdeveloped speech. The representation of certain types of answers was calculated.

- The research was carried out in the pre-school institution "Drugarstvo" in Kragujevac. The testing was started after obtaining the consent of the administration of the pre-school institution and the parents of the respondents. The subjects were tested in a room isolated from noise.

## Results

Our data showed that in the age category of five-year-olds there were 13 (26%) boys and 12 (24%) girls, while in the six-year-old category there were 12 (24%) boys and 13 (26%) girls. In order to examine the existence of the difference between respondents of different sexes, we used the chi-square test, and in this case no statistically significant difference was observed in terms of sexes between the two age groups of respondents ( $\chi^2 = .000$ ,  $df = 1$ ,  $p = 1.000$ ).

The value of the Kolmogorov-Smirnov test for the total score of the Semantic test, homonyms, metonyms, synonyms subscales was  $p > 0.05$ , while only on the antonyms subscale, the Kolmogorov-Smirnov test had the value of  $p < 0.05$ . For the Word Association

Test, the Kolmogorov-Smirnov test showed values less than 0.05 ( $p < 0.05$ ), so we used non-parametric statistics to analyze achievement on that test.

Table 1 shows the descriptive indicators of the respondents' achievements on the Semantic Test. Our results showed that six-year-olds had higher average values compared to five-year-olds on the total score, as well as on individual lexical categories of the Semantic test (synonyms, homonyms, metonyms, and antonyms). It could also be seen that female respondents in the category of five-year-olds had higher average values in all examined lexical categories of the Semantic Test, compared to male respondents. At the age of six, we got slightly different results. Namely, in this age group, the differences in achievements on the Semantic Test were less pronounced in relation to the sex of the respondents, in the sense that girls were better in only two examined lexical categories (metonyms and antonyms). On the other hand, six-year-old boys had better achievements on the categories of synonyms and homonyms, as well as on the total score of the Semantic Test.

Table 2 shows the achievements of the examinees on the Free Word Association Test, expressed in percentages. Percentages were calculated in relation to the total number of responses for certain categories of participants, for example: provided by boys of a specific age, i.e., out of a possible 442 responses from boys aged five, there were 13 with no response, or 2.94%. When it came to the percentage representation of the most desirable type of response (paradigmatic), at the age of five we observed better achievements in female respondents with 257 (62.99%) responses, compared to male respondents who achieved 227 (51.36%) paradigmatic answers. Six-year-old boys had higher percentage of paradigmatic answers (63.97%) compared to girls (50.68%).

Further analysis of the data showed that in the age category of five-year-olds, girls

**Table 1.** Descriptive indicators of the respondents' achievements on the Semantic Test

Lexical categories	Sex	Five –year-olds				Six – year- olds			
		AS	SD	Min	Max	AS	SD	Min	Max
Synonyms	M	4.00	1.00	3.00	6.00	5.33	1.96	2.00	8.00
	F	4.50	1.73	2.00	8.00	4.30	1.03	2.00	6.00
Homonyms	M	3.53	1.61	1.00	6.00	6.00	2.33	0.00	10.00
	F	5.00	2.04	3.00	10.00	5.69	2.35	1.00	9.00
Metonyms	M	4.38	2.46	0.00	7.00	5.83	3.01	0.00	10.00
	F	5.25	2.13	2.00	10.00	6.15	2.33	0.00	9.00
Antonyms	M	4.76	1.78	2.00	8.00	6.41	2.15	4.00	10.00
	F	5.66	1.66	3.00	8.00	6.46	1.05	5.00	8.00
Total score	M	16.69	5.07	8.00	24.00	23.58	7.45	13.00	37.00
	F	20.41	5.82	13.00	31.00	22.76	4.76	11.00	28.00

Legend: M - male, F - female, AS - arithmetic mean, SD - standard deviation

**Table 2.** Percentage representation of respondents' responses to the Free Word Association Test

Response categories	Five – year - olds		Six – year – olds	
	Boys	Girls	Boys	Girls
No response	13 (2.94%)	17 (4.17%)	7 (1.72%)	23 (5.20%)
Echolalic	20 (4.53%)	8 (1.96%)	10 (2.45%)	18 (4.07%)
Neologisms	39 (8.82%)	23 (5.64%)	22 (5.39%)	40 (9.05%)
Non+stimulus	98 (22.17%)	70 (17.15%)	75 (18.38%)	92 (20.81%)
Derived responses	18 (4.07%)	18 (4.41%)	22 (5.39%)	14 (3.17%)
contextual	11 (2.49%)	2 (0.49%)	0%	13 (2.94%)
Phrases	16 (3.62%)	13 (3.19%)	11 (2.70%)	18 (4.08%)
Paradigmatic	227 (51.36%)	257 (62.99%)	261 (63.97%)	224 (50.68%)

\*Note: Percentages are calculated in relation to the total number of responses provided by certain category of participant

had lower number of infantile responses in the form of echolalia, neologisms and non+stimulus responses compared to boys. On the other hand, at the age of six, lower number of infantile responses (echolalia, neologisms and non+stimulus responses) was found in boys.

#### *Relationship among sex and age and performance on applied tests*

Comparing the obtained results, it was determined that girls had higher average values compared to boys of the same age on the total score of the Semantic Test (Table 3). However, when comparing the results on individual lexical categories (synonyms, homonyms,

metonyms, antonyms), it was determined that boys had higher average values in the categories of synonyms and antonyms, and girls in the categories of homonyms and metonyms. However, there was neither statistically significant difference between sexes in terms of performance on the overall score of the Semantic test, nor on individual scales (Table 3).

The difference in the prevalence of different categories of responses on the Word Association Test in relation to the sex of the participants was determined using the Mann-Whitney U test (Table 4). When it came to the categories "no response" and neologisms, the statistically significant difference between boys and girls

**Table 3.** Sex differences on the Semantic Test

Semantic test	Sex	N	Mdn	Man–Vitni U	Z	p
Synonyms	boys	25	4.00	295.500	-.339	.735
	girls	25	5.00			
Homonyms	boys	25	5.00	267.000	-.894	.371
	girls	25	5.00			
Metonyms	boys	25	5.00	265.500	-.924	.355
	girls	25	6.00			
Antonyms	boys	25	5.00	255.000	-1.133	.257
	girls	25	6.00			
Total score	boys	25	19.00	249.500	-1.224	.221
	girls	25	23.00			

**Table 4.** Sex difference in achievements on the Free Word Association Test

Response categories	Sex	N	Mdn	Man–Vitni U	Z	P
No response	boys	25	22.20	219.500	-2.004	<b>0.028</b>
	girls	25	28.80			
Echolalic	boys	25	26.14	296.500	-0.341	0.733
	girls	25	24.86			
Neologisms	boys	25	29.06	220.000	-1.980	<b>0.047</b>
	girls	25	20.94			
Non+stimulus	boys	25	23.28	257.000	-1.080	0.280
	girls	25	27.72			
Derived responses	boys	25	25.10	302.500	-0.202	0.840
	girls	25	25.90			
Contextual	boys	25	26.04	299.000	-0.636	0.525
	girls	25	24.96			
Phrases	boys	25	26.30	292.500	-0.435	0.664
	girls	25	24.70			
Paradigmatic	boys	25	24.82	295.500	-0.332	0.740
	girls	25	26.18			

**Table 5.** Correlations of age with achievements on the Semantic Test

	Synonyms	Homonyms	Metonyms	Antonyms	Total score
Age	0.218	0.436**	0.256	0.331*	0.369**
	0.128	0.002	0.073	0.019	0.008

\* $p \leq 0.05$ ; \*\* $p \leq 0.01$

was observed. Specifically, it was found that girls had more missing answers compared to boys ( $U = 219.500$ ,  $Z = -2.004$ ,  $p = 0.028$ ). On the other hand, responses in the form of neologisms were statistically more prevalent in girls compared to boys ( $U = 220.000$ ,  $Z = -1.980$ ,  $p = 0,047$ ). Regarding the prevalence of other categories of responses obtained through the application of Word Association Test, no statistically significant difference between boys and girls was observed.

Pearsons's test was used to examine the relationship between age and achievements on the Semantic Test (Table 5). The results showed that there was a positive correlation between age and development of the lexical category of homonyms ( $p = 0.002$ ), age and antonyms ( $p = 0.019$ ), as well as age and the total score on the Semantic Test ( $p = 0.008$ ). The obtained findings implicitly showed that with increasing age, the lexical diversity of the terms represented in the category of words of the same expression, but of different meaning (homonyms) as well as words of the opposite meaning (antonyms) increased. On the other hand, no statistically significant correlation was found between age and the development of the lexical categories synonyms and metonyms.

## Discussion

This study aimed to determine the lexical-semantic abilities of children aged five to six. The results of the Semantic Test showed that six-year-olds had higher average values compared to five-year-olds, both on individual lexical categories (homonyms and antonyms) and on the overall score. This finding showed that with increasing age, the lexical diversity of the terms represented in the category of words with the same expression but different meaning, as well as words with the opposite meaning, increased. Therefore, we can say that our results confirm the findings of other

authors who also state that children's ability to master the meaning relationships between words increases with age [11]. On the other hand, no significant correlation was found between age and the increase in the number of words in the categories of synonyms and metonyms among the children included in the research. This finding showed that in children of typical development at the age of six, a significant jump in the development of homonyms and antonyms was observed in comparison to children at the age of five. Our results are in agreement with the findings of other authors who also state that significant increase in lexical-semantic abilities is observed after the age of five [5]. Some authors point out that children aged six years produce significantly more paradigmatic answers compared to non-paradigmatic or syntagmatic answers [12], which also speaks in favor of increasing lexical-semantic abilities in children of this age.

However, when it comes to Free Word Association Test, there was no correlation between age and different qualities of responses. Descriptive statistics show some slightly differences between lexical-semantic abilities in terms of quality of the answers to the Word Association Test. For example, frequency of infantile/immature responses (no response, echolalic response, phrase response) decreased with age in boys. This finding indicated the course of development of the lexical-semantic structure, which should be taken into account when evaluating the lexicon of children with a delay in language development. Namely, it has been shown that children with developmental language disorder (DLD) have significant deficits in the lexical-semantic processing [13]. These authors also concluded that children with DLD and typically developed children had a similar developmental pattern in the acquisition of lexical-semantic abilities. Therefore, the significant presence of immature answers on the Free Word Association Test can be a signifi-

cant indicator for a more detailed assessment of the lexical-semantic structure in children with suspected delay in core language development.

Further analysis of the obtained results showed that there were significant differences between boys and girls regarding the quality of answers. More precisely, girls had significantly more omitted answers. On the other hand, girls had more responses in form of neologisms compared to boys. These findings suggested possible differences in the quality of processing lexical items between boys and girls of the examined age, which might represent a challenge for future research. The existence of differences in lexical-semantic abilities between male and female respondents was also indicated by certain results of the Semantic test. Namely, boys achieved better results in the categories of synonyms and antonyms, and girls in the categories of homonyms and metonyms. The research on lexical diversity in children of younger school age which was carried out in four basic schools in the Republic of Croatia, generally did not find statistically significant differences in terms of lexical development between boys and girls. Namely, it was shown that girls and boys of school age were equally successful on the task of lexical diversity [14]. Statistically significant differences in terms of lexical-semantic abilities between boys and girls were not established even in a previously published study that included children aged five and six [15]. It is interesting, however, that the findings of some studies show that there are certain variations in responses between children of different sexes, and in different age categories [16]. Our results suggest possible differences in the pattern of development of lexical-semantic structure between boys and girls of typical language development at pre-school age. Given that, we believe that the

control of cognitive and social variables in future research could contribute to explaining the nature of these differences.

Finally, since children are constantly acquiring new words, monitoring lexical development in children provides some insight into the formation of the mental lexicon and its approximation to the mental lexicon of an adult, which is also discussed by other authors [17].

*Limitation of the study:* One of the limitations of this study is the relatively small sample size. Therefore, future research should include larger number of respondents in different age categories. Also, it would be useful to conduct a longitudinal study in this area.

## Conclusion

Based on the research objectives, applied methodology and analysis of the obtained results, it was concluded that lexical-semantic abilities increased with age. More precisely, six-year-old children have significantly more developed lexical-semantic abilities compared to five-year-old children. On the Semantic Test, a positive correlation was established between age and homonyms, age and antonyms, as well as age and the total score achieved on the Semantic Test. Finally, we can conclude that the results of our study can represent a starting point for determining the level of lexical-semantic development in children aged five to six. We also believe that these data can be used as the starting point for the detection of lexical-semantic deficits in children with developmental language disorders. Therefore, we recommend a comparative study of lexical-semantic abilities in children with typical language development and children with a delay in language development in future research.



## Test 1. Semantic Test

### SEMANTIČKI TEST

S. Vladislavljević

Ime i prezime \_\_\_\_\_, godina rođenja \_\_\_\_\_,

Broj kartona \_\_\_\_\_, Razred \_\_\_\_\_, Ocena iz srpskog \_\_\_\_\_

Reči	HOMONIMI – / Pitanje: šta sve mogu da znače sledeće reči?/	Poeni
SUD		
STO		
KOŠ		
POL		
VREME		
BRANA		
POLITIKA		
BORBA		
NADA		
ZEMLJA		
Ukupno:		

Reči	SINONIMI / Pitanje: kako se još može drugačije reči?/	Poeni
VRT		
SOBA		
DOM		
META		
SAT		
ĐAK		
ISTRAŽIVAČ		
PUT		
DIVOTA		
SNAGA		
Ukupno:		

Reči	ANTONIMI – / Pitanje: Šta je suprotno, sasvim drugo, od sledećih reči? /	Poeni
ŽIVOT		
ZDRAVLJE		
SREĆA		
ULAZ		
DAN		
JUTRO		
MLADOST		
MUŠKARAC		
SETVA		
LJUBAV		
Ukupno:		

Reči	METONIMI – / Pitanje: Šta bi u prenesenom smislu značilo ili za koga kažemo da je.../	Poeni
PUŽ		
ZLATO		
ZMIJA		
SRNA		
CVET		
KAP		
VAŠAR		
LISICA		
STENA		
ZEC		
Ukupno:		

TABELA	
STAROST	SREDNJA VREDNOST
6,6 – 7,5	< 31,6 >
7,6 – 8,5	< 40,1 >
8,6 – 9,5	< 42,8 >
9,6 – 10,5	< 47,0 >

ZAKLJUČAK \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

DATUM: \_\_\_\_\_

ISPITIVAČ: \_\_\_\_\_

## Test 2. Test of free word associations

TEST SLOBODNIH ASOCIJACIJA

(S. Milekić)

br.	reč	odgovor	br.	reč	odgovor
1.	voće		18.	međutim	
2.	miran		19.	sladak	
3.	sreća		20.	ruka	
4.	igla		21.	želeti	
5.	ja		22.	između	
6.	ulica		23.	biti	
7.	žedan		24.	ah	
8.	imati		25.	petoro	
9.	brz		26.	majka	
10.	sedeti		27.	crn	
11.	lekar		28.	bolest	
12.	moje		29.	veliki	
13.	sa		30.	osam	
14.	sobar		31.	ponekad	
15.	trčati		32.	so	
16.	ako		33.	dole	
17.	leptir		34.	Sunce	

Razvojne kategorije odgovora		broj
1.	Bez odgovora	
2.	Eholalični odgovori	
3.	Izvedeni odgovori	
4.	Kontekstualni odgovori	
5.	Negacija + stimulus	
6.	Odgovor frazom	
7.	Neologizmi	
8.	Paradigmatski odgovori	

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**Ethical approval.** The Ethics Committee of the University of Belgrade, Faculty of Special Education and Rehabilitation, Belgrade, Serbia, approved the study and informed consent

was obtained from all individual respondents. The research was conducted according to the Declaration of Helsinki.

**Conflicts of interest.** The authors declare no conflict of interest.

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## Leksičko-semantičke sposobnosti dece uzrasta od pet do šest godina

Ana Jegdić<sup>1</sup>, Mile Vuković<sup>2</sup>

<sup>1</sup>Centar za edukaciju Novaković, Kragujevac, Srbija

<sup>2</sup>Univerzitet u Beogradu, Fakultet za specijalnu edukaciju i rehabilitaciju, Beograd, Srbija

**Uvod.** Razvoj semantičkog nivoa jezičkog sistema počinje krajem prve godine života, kada dete počinje da upotrebljava prve reči. Tokom detinjstva dete postepeno uvećava fond reči i saznaje njihova semantička obeležja. Cilj ovog rada jeste da se utvrde leksičko-semantičke sposobnosti kod dece predškolskog uzrasta.

**Metode.** U uzorak je uključeno 50 dece, oba pola, uzrasta od pet do šest godina. Prema uzrastu, ispitanici su podeljeni u dve grupe, prvu grupu činili su petogodišnjaci, a drugu šestogodišnjaci. U istraživanju su korišćeni Semantički test i Test slobodnih asocijacija reči. Semantičkim testom je procenjivana razvijenost sledećih kategorija reči: homonim, antonim, sinonim i metonim, dok su Testom slobodnih asocijacija reči ispitivane vrste odgovora nakon date stimulus reči.

**Rezultati.** Utvrđeno je da šestogodišnjaci imaju veće prosečne vrednosti u odnosu na petogodišnjake na ukupnom skor, kao i na pojedinačnim leksičkim kategorijama Semantičkog testa. Takođe je pokazano da devojčice uzrasta pet godina na ovom testu imaju veće prosečne vrednosti u poređenju sa dečacima istog uzrasta. Na Testu slobodnih asocijacija reči nisu utvrđene statistički značajne razlike između petogodišnjaka i šestogodišnjaka u pogledu zastupljenosti pojedinih vrsta odgovora. Što se tiče pola, pokazano je da na Testu slobodnih asocijacija reči devojčice imaju statistički značajno više izostanaka odgovora na datu stimulus reč u poređenju sa dečacima.

**Zaključak.** Zaključeno je da leksičko-semantičke sposobnosti dece predškolskog uzrasta zavise od uzrasta, te da postoji određena zakonomernost u razvoju semantičkih obeležja reči i leksičko-semantičke strukture.

**Ključne riječi:** leksikon, semantika, deca