

# Fairytales Semantic Differential Technique: Diagnostic Possibilities

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The method “Fairy Semantic Differential”, during which a respondent should assess a number of fairy-tale characters according to a set of personal characteristics, is designed for the individual work of a psychologist with children 4—10 years old. Personality characteristics, according to which the characters are evaluated, are formulated by words that adults use when dealing with children of this age. An analysis of the child’s attitude to characters allows us to determine the specificity of his/her moral-value sphere. Quantitative indicators that can be calculated using the data of the answering the questionnaire are discussed. These indicators characterize the child’s attitudes toward oneself and others, dimension of categorial space of interpersonal perception, content and hierarchy of these categories, the level of cognitive development in this area, the degree of socialization. The results of an empirical study are presented. Age/sex differences in the cognitive complexity of interpersonal perception and socialization were shown. For each indicator normative intervals are calculated. Examples of individual semantic space are presented.

**Keywords:** Psychosemantics, repertoire grids, “Fairy Semantic Differential”, test of cognitive abilities, cognitive complexity, socialization, interpersonal perception, age and sex norms, 4—10 years old children.

The Fairytales Semantic Differential (*FSD*) was designed by V. Petrenko [6] as psychosemantic method to examine cognitive complexity of children’s interpersonal perception and elicit personal constructs, as well as to determine

the levels of self-evaluation and socialization. This method was designed for children aged between 4 and 10, i.e. of preschool and primary school age. Later, a computer version was developed [7].

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The psychosemantic approach developed from the mid-1970s in the USSR, and later in Russia as a methodology that allows research related to the reconstruction of the mentality of people (or, as A.N. Leontiev wrote, the study of the world picture). This direction arose on the basis of combining the approaches of Ch. Osgood [20], G. Kelly [19], the studies of J. Miller and the method of the Semantic radical A. Luria [21].

In a fairy tale characters embody certain ideologemes shared by adults and transmitted to the child through social training. A fairytale constitutes a “model” text that imparts social norms [13]. Fairy tales convey certain norms and rules from social to individual consciousness. Social consciousness contains the norms and traditions of a group with a distinct cultural and historical identity that determine its system of values. The role of critical reflection in this process of norm acquisition, if any, is typically inessential [1].

By analyzing a child’s attitude to a certain fairytale character it is possible to identify his or her individual moral values. Personality traits used for assessing characters are formulated in terms that young respondents are familiar with, i.e. these are words used by parents, preschool and school teachers when communicating with children of this age.

Through identification with personages, the child has one’s own behavioral guidelines. Attribution (understanding) of the personality qualities of the fairy-tale character is an important stage in the formation of interpersonal perception, so necessary in the social life of a person.

The child’s answers to the questions are grouped into a data matrix (characters’ scores on the primary variables — personal characteristics). It is interesting to look at correlations between these personal characteristics in the representations of the child. For example, among boys, the variable “crybaby” most often negatively correlates with “loyal friend” and “bold”, while among girls negative correlations are with “evil” and “rude”. So it is possible to determine how personal correlations corresponds to tendencies reflecting belonging to

some gender or subculture (determine for example by ethnicity of the child). Also the answers’ data matrix is processed using principal component analysis. Content of the components allows knowing the specificity of the personal constructs. % of variance of each component establishes their hierarchy. Analysis of the semantic space of a child, where the fairy-tale characters and the position of the child (“I myself”) in the form of coordinate dots are located in this space in personal counselling allows psychologists to reconstruct a fragment of the child’s worldview and glimpse the world through the child eyes.

An analysis of the position of the “Myself” position in the semantic space and the comparison of this place with the positions of other characters allows one to determine the child’s self-esteem [8].

Moreover, a number of indicators can be used to compare individual results with other children. These indicators are meaningful in a psychological sense; they can be compared with the same indicators of other children and thus used to determine age norms. Cognitive complexity of interpersonal perception is one of such indicators.

**Cognitive complexity** is one of the main indicators of individual development.

The simplest form of categorization in the FSD technique is one-dimensional. All positive traits form one pole of this category, while the other pole is represented by the negative traits.

If a child is not sufficiently developed, e.g. is still small, or has a low mental age due to mental disorder, then a lot of personal qualities for him are glued together on the basis of an evaluation component.

So, if a personage is kind, for example Aibolit<sup>1</sup>, then from the point of view cognitively simple person he is beautiful and obedient, and the Snow Queen is evil, ugly and stupid. Individual symptoms, thus, in an undeveloped child are highly correlated with each other. However, during development the child can begin to understand that a character, for example Cheburashka<sup>2</sup>, can be kind, but is not too beautiful, and the evil Snow Queen can be called beautiful. In other words, in

<sup>1</sup> The central character of a series of children’s books by K. Choukovsky, loosely based on Doctor Dolittle created by Hugh Lofting.

<sup>2</sup> A character of a popular Soviet cartoon by E. Uспенky.

the course of development, the semantic differentiation of the personal qualities attributed to the characters takes place, and they are split into a fan of independent characteristics.

Yu. Zhukov [16] found an interrelation between cognitive complexity and the effectiveness in interpersonal cognition. A. Yuzhaninova [14; 15] demonstrated the link between cognitive complexity and effective social intelligence skills, as well as various types of communication problems. Data suggests that cognitively complex individuals are more critical in perceiving themselves and others [12].

Cognitively complex individuals are better at adapting to changing social circumstances and taking the other person's point of view, and are more effective in communicating messages [23]; they are able to detect shades of meaning, in contrast to cognitively simple individuals, who see the world as black and white.

In *FSD* cognitive complexity was determined not only through the number of independent components, showing dimension of semantic space (which is not well differentiating indicator), but another two complementary indicators [17] which are real interval measurements.

The first indicator of cognitive complexity<sup>3</sup> is the percent of contribution of the first factor in non-rotated solution to the total variance  $\sigma_1^2$ . In psychological terms, this indicator demonstrates that cognitively simple individuals have a less dimensional space, i.e. most items load highly on the first component and its contribution to the total variance is significantly higher compared to other components, with no significant loadings on other components. In an extreme example, there is one component, e.g. "good/bad", "like/dislike", and its contribution to the total variance approximates 100%. In this case  $\sigma_1^2 = 1$ . In contrast, more cognitively complex individuals have more categories of perception and their contributions to the total variance are more evenly distributed, which decreases the contribution of the first component.

So

$$CC_F = 1 - \sigma_1^2; \sigma_1^2 \in [0; 1] \quad (1)$$

The second indicator of cognitive simplicity/complexity is the average absolute values of the pairwise correlation coefficients between all primary variables. The more cognitively complex a person is, the better he or she is in perceiving differences between seemingly synonymous traits and the lower is the correlation value between them. In this case cognitive simplicity results in synonymy turning into sameness, and antonym becoming polar opposition. The following formula is used to calculate cognitive simplicity:

$$CC_{cor} = \frac{\sum_{i \neq j=1}^N |r_{ij}|}{N^2 - N} \quad (2)$$

where  $N$  is the total number of variables,  $r_{ij}$  is the correlation coefficient for variables number  $i$  and  $j$ .

It is worth noting that cognitive simplicity is generally interpreted as an individual's inability to construct social environmental space on the basis of a variety of independent dimensions. High cognitive complexity may as well indicate the absence or the lack of manifestation of generalized semantic connections between primary variables in the respondent's mind, underdeveloped categorical systems, or a disarranged space of the primary variables. Such phenomena may be observed in children with schizophrenia, who have a high cognitive complexity combined with a low level of socialization (for more details see below). However, this does not mean that this technique can be used for diagnosing schizophrenia; rather, one might consider consulting a psychiatrist.

### Measuring socialization

Socialization is a process through which a child acquires norms and values shared by the adults in his or her environment. It may be noted that the acquisition of moral norms and socially acceptable behavior is an essential part of child socialization. According to Turiel [25] the basic categories of social knowledge begin to take shape in early childhood, and social development is only possible through the interaction with social environment, which contains the domains of

<sup>3</sup> Strictly speaking this is measure of cognitive simplicity, which we assume as an opposition.

social knowledge — a certain “area” of rules and norms for a child to acquire. Another important part of socialization process is the acquisition of socially acceptable behavior, the primary motive being the need for approval. Crowne and Marlowe [18] found that socially acceptable behavior is related to deeper needs for approval, attention and higher self-esteem. Bozhovich [2] argues that after “the system of the Self” has developed, a principal new formation emerges — namely, self-evaluation and the corresponding urge to meet the demands set by the adult.

The idea of comparing assessments is based on the assumption that in society the adult is the source of child socialization and to a certain extent the child inherits the adult’s system of assessments (including the assessments of fairytale characters).

Comparison of the semantic space of a specific child with the normative semantic space of adults allows introducing a measure of socialization of the child — how much his/her assessments of the characters are similar with adults’ assessment.

To assess the level of child socialization, we compare two data sets: the child’s response matrix and the “normative” matrix (the averaged matrix of adult responses). The degree of proximity between them is calculated. The current “normative” (“adult”) matrix was calculated on the basis of a survey of 61 people (30 parents of elementary school’s children and 31 the same school level teachers).

As a result, socialization was calculated as follows. For a set of estimates  $\{o_{ij}\}$ , the matrix of the estimates provided by the child, and the adult matrix  $E = \{e_{ij}\}$ , obtained by averaging the ratings of each character for each scale in the adult sample, we calculated socialization index:

a) With the Pearson formula

$$Soc_p = corr(\{o_{ij}\}, \{e_{ij}\}); i = 1 \dots M; j = 1 \dots N; \quad (3)$$

b) With the Euclidean formula

$$Soc_E = 1 - \sqrt{\frac{\sum_{i=1}^M \sum_{j=1}^N (\sigma_{ij} - e_{ij})^2}{2 \cdot M \cdot N}}; \quad (4)$$

$N$  — the number of primary variables,  $M$  — the number of personages.

Both measures are quite common in multidimensional statistical analysis. There are no certain guidelines for choosing a measure of similarity, so we used two sets of indicators (Euclidian similarity and Pearson similarity) in parallel. It is not yet clear which indicator represents the measure of socialization more accurately, so we recommend using both. Both indices are low than 1. The higher the socialization, the closer the value is to 1, the more the matrix of the child respondent resembles the “adult” matrix, and therefore the child can be said to have learned the normative rules for evaluating characters according to the evaluation characteristics, as it is “accepted” among adults.

Cognitive complexity and socialization should be interpreted together. For example, children with schizophrenia can demonstrate high cognitive complexity (primary items are independent (low correlated), but the ratings of the characters themselves are strikingly different from the adults’ rating, and thus show that this child has a low measure of socialization.

### Other implication of FSD

Along with establishing age norms for cognitive complexity and the measure of socialization, we attempted to introduce a self-evaluation measure, according assessing personage “Myself” by primary variables and comparing the position of “Myself” with positions of other personages.

The position of the child him/herself (coordinates of the dot corresponding to self-assessments in the semantic space) demonstrates the specifics of self-awareness and identification (which characters he/she is psychologically closer to). Closer the point corresponding Myself is to point of this or that personage more identification with this personage is. And this identification or distance help to interpret child’s self-esteem [8].

In addition, the technique allows for the assessment of reality characters. Firstly, the child assesses oneself according to the same trait list. Depending on the psychologist’s objectives, such characters as *Mom*, *Dad*, *Teacher*, etc. can be introduced. And thus examination of the relations in the immediate family and social circle from the child’s standpoint can be done.

By comparing the scores of fairytale characters with the scores of significant adults it is

possible to determine the child's attitude to these adults. For example, *Teacher's* closeness to the character of *The Snow Queen* or *Baba Yaga* can be a warning sign for both parents and the teacher. By comparing the child's self-scores with the scores of significant adults it is possible to identify the degree to which the child identifies with them.

Thus the method of the "Fairytale Semantic Differential" describes the personal constructs used by the child in interpersonal perception and their structure, allows assessing the cognitive complexity of the child's consciousness and determines the measure of his/her socialization,

characterizing the child's self-awareness, the specifics of his/her self-identification, and his/her evaluation of significant adults.

### Specification of Fairytale semantic differential

In the standard computer version, a child assesses 8 fairytale characters and oneself from the basic set of characters according to 15 personality characteristics, selected in such a way that they correspond to the child's lexicon (see Fig.1). In contrast to the classical method of the Semantic differential of Osgood [20], in



Fig. 1. Main personages of Fairytale semantic differential and list of primary variables

<sup>4</sup> Strictly The protagonist of "The Adventures of Buratino" by A. Tolstoy, the Russian version of "Pinocchio" by Carlo Collodi.

<sup>5</sup> The main villain in "The Adventures of Buratino".

<sup>6</sup> A character of a series of children's books by the Swedish author Astrid Lindgren and popular Soviet cartoon adaptation.

<sup>7</sup> Malvina and Pierrot are characters of "The Adventures of Buratino", Buratino's friends.

our Fairy Semantic differential we use not bipolar antonym scale, but unipolar (single-pole) characteristics.

In the computer version, prior to the beginning of a session fairytale characters are consecutively presented on a computer screen, with the child being asked to identify each of them. This needs to be done so as to eliminate the characters which the child is not familiar with. If a character, i.e. *the Snow Queen*, is unfamiliar to the child, *the Snow Queen* is automatically replaced in the character list with a relevant but more well-known character — *Baba Yaga*<sup>8</sup>. If the child does not know *Doctor Aibolit*, the program replaces him with *Papa Carlo*<sup>9</sup>, etc.

In the second step the child is asked to assess the presence or absence of a fairy-tale character of certain personal qualities. Good Aibolit or not? And what about Karabas? And what about Malvina? And about Pierrot? etc. And what about you: are you good?

The child should choose one of three options for an answer on the screen:

- Yes (coded as 1),
- I do not know, I'm not sure, medium (coded as 0),
- No (coded as -1).

Thus, the assessment is carried out on a 3-point Likert-type scale.

It was shown, that more than 80% of children living in Moscow are familiar with these 8 person-ages [9].

Fairytale characters are familiar to children, which is why we decided to use them for assessment.

Children are happy to participate in the testing, perceiving this as a kind of game, and often give comments about their assessments.

The empirical study

We used the computer version of the *FSD* method in an empirical study conducted in 2017—2018. The participants were 296 children aged 4 to 10 y.o., of both sexes, studying in preschool and grades 1 to 3 in Moscow schools. Table 1 shows the age-sex distribution of the children sample. Each participant performed the procedure individually in the presence of the experimenter.

### Data analysis

#### Cognitive complexity.

**Correlations between  $CC_F$  and  $CC_{COR}$**  = 0,978, so below all results will be presented for cognitive complexity measured by formula (1), that means for  $CC_F$ .

We can see that distribution of  $CC_F$  in each group is normal. So we can use standard linear formula to establish grades for interpretation level of cognitive complexity.

In the table levels of cognitive complexity are presented. The borders are calculated by following rules:

The low border of moderate level is  $B_L = Mean - Standard\ deviation$ ,

The high border of moderate level is  $B_H = Mean + Standard\ deviation$ ,

Table 1

Sample description according sex and age

Age	Sex	Girls	Boys	Total
4		21	14	35
5		36	23	59
6		40	12	52
7		23	21	44
8		29	24	53
9		15	21	38
10		8	7	15
Total		174	122	296

<sup>8</sup> A character from Russian folklore, a fearsome old witch.

<sup>9</sup> A character of "The Adventures of Buratino", Buratino's "father".

so all results which are lower, than low border of moderate level ( $B_L$ ) we interpret as low level of cognitive complexity, and those results which are higher than high border of moderate level ( $B_H$ ) we interpreted as high level.

Of course the number of respondents in each group is small and we can use intervals as preliminary only. Establishing more reliable intervals will be done in our future studies.

In the fig. 2 means and 95% confidence intervals for each sex and age group are presented. Using such visualization it is easy to see when mean in one subsample significantly differ from mean for another subsample. It happens if intersection of two confidence intervals of these subsamples is empty. So we can conclude that girls 4 years old have significantly low  $CC$  and girls 10 years old have  $CC$  significantly higher. Some light decrease we can see in the age 7 years old. Probably it is caused by restructuring categorical system. There could be several reasons: entering to school, some cognitive changes in this age: moving from preoperational stage to concrete operational stage

[21]. Also there are significant differences between variance among girls in these age groups: in age 4 and 7 the highest variance. So we can mention that lower mean correlated with higher variance.

There are no significant differences either in means, or in variances among boys in cognitive complexity along age.

Comparison between boys and girls in different age show significantly higher cognitive complexity among boys in the age 4. It can be explained that we really met with a situation when some kids answered chaotically and it is easy to reveal such respondents: they should have low measure of socialization. From here it is easy to check reliability of conclusion. High index of cognitive complexity is due to chaotic answers or cognitive complexity is really high.

Also it was shown that adults demonstrate significantly higher cognitive complexity, than children [9].

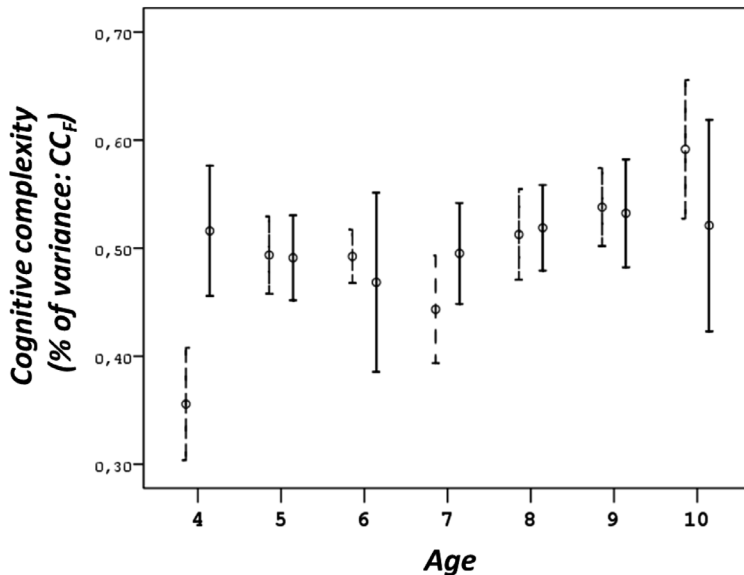
Correlations between  $SOC_{COR}$  and  $SOC_{EUC} = 0,943$ , so below all results will be presented for socialization measured by formula (3), that means for  $SOC_{COR}$

Table 2

**Descriptive statistics and levels of cognitive complexity**

Age	Min	Max	Mean		St. Dev.	Sig. KS Test <sup>10</sup>	Levels of cognitive complexity		
			Statistics	St. E.			Low	Moderate	High
Girls									
4	0,14	0,54	0,36	0,03	0,115	0,993	< 0,24	[0,24; 0,47]	> 0,47
5	0,25	0,68	0,49	0,02	0,106	0,759	< 0,39	[0,39; 0,60]	> 0,60
6	0,31	0,65	0,49	0,01	0,077	0,703	< 0,42	[0,42; 0,57]	> 0,57
7	0,21	0,64	0,44	0,02	0,115	0,97	< 0,33	[0,33; 0,56]	> 0,56
8	0,30	0,73	0,51	0,02	0,110	0,334	< 0,40	[0,40; 0,62]	> 0,62
9	0,39	0,68	0,54	0,02	0,070	0,695	< 0,47	[0,47; 0,62]	> 0,62
10	0,41	0,64	0,59	0,03	0,077	0,987	< 0,52	[0,52; 0,67]	> 0,67
Boys									
4	0,39	0,69	0,52	0,03	0,104	0,668	< 0,40	[0,40; 0,58]	> 0,58
5	0,27	0,65	0,49	0,02	0,091	0,717	< 0,40	[0,40; 0,58]	> 0,58
6	0,14	0,60	0,47	0,04	0,131	0,964	< 0,34	[0,34; 0,60]	> 0,60
7	0,27	0,63	0,50	0,02	0,103	0,881	< 0,39	[0,39; 0,60]	> 0,60
8	0,32	0,69	0,52	0,02	0,094	0,913	< 0,42	[0,42; 0,61]	> 0,61
9	0,28	0,73	0,53	0,02	0,110	0,234	< 0,42	[0,42; 0,64]	> 0,64
10	0,31	0,62	0,52	0,04	0,106	0,762	< 0,42	[0,42; 0,64]	> 0,64

<sup>10</sup> Significance of Kolmogorov — Smirnov test for testing normality.



— boys, - - - girls; Error Bars show 95,0% CI of Mean

Fig. 2. Dynamic of cognitive complexity during age

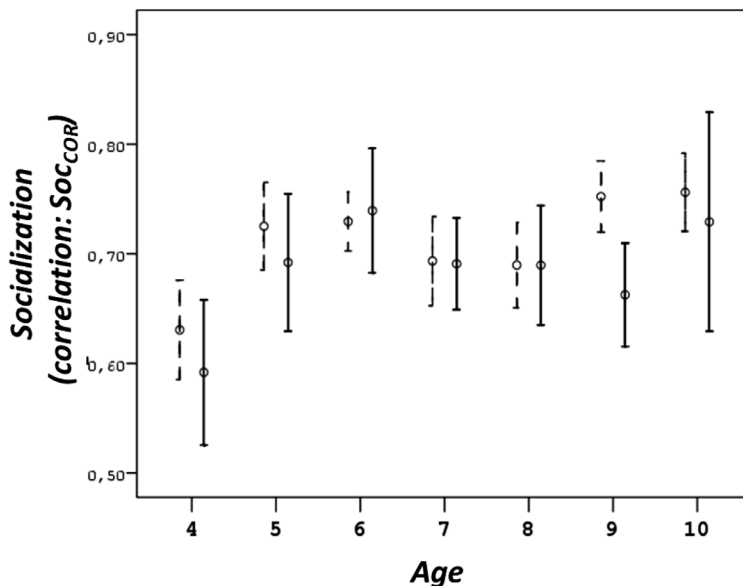
Table 3

**Descriptive statistics and levels of socialization**

Age	Min	Max	Mean		St. Dev.	Sig. KS Test <sup>11</sup>	Levels of socialization		
			Statistics	St. E.			Low	Moderate	High
Girls									
4	0,40	0,79	0,63	0,02	0,10	0,865	< 0,53	[0,53; 0,73]	> 0,73
5	0,37	0,87	0,73	0,02	0,12	0,687	< 0,61	[0,61; 0,84]	> 0,84
6	0,50	0,83	0,73	0,01	0,08	0,314	< 0,65	[0,65; 0,81]	> 0,81
7	0,41	0,81	0,69	0,02	0,09	0,360	< 0,60	[0,60; 0,79]	> 0,79
8	0,43	0,85	0,69	0,02	0,10	0,410	< 0,59	[0,59; 0,79]	> 0,79
9	0,59	0,85	0,75	0,02	0,06	0,934	< 0,69	[0,69; 0,82]	> 0,82
10	0,71	0,82	0,76	0,02	0,04	0,810	< 0,71	[0,71; 0,80]	> 0,80
Boys									
4	0,31	0,80	0,59	0,03	0,12	0,898	< 0,48	[0,48; 0,71]	> 0,71
5	0,30	0,84	0,69	0,03	0,15	0,574	< 0,55	[0,55; 0,84]	> 0,84
6	0,54	0,82	0,74	0,03	0,09	0,659	< 0,65	[0,65; 0,83]	> 0,83
7	0,47	0,81	0,69	0,02	0,09	0,900	< 0,60	[0,60; 0,78]	> 0,78
8	0,19	0,82	0,69	0,03	0,13	0,403	< 0,56	[0,56; 0,82]	> 0,82
9	0,47	0,84	0,66	0,02	0,10	0,938	< 0,56	[0,56; 0,77]	> 0,77
10	0,50	0,82	0,73	0,04	0,11	0,435	< 0,62	[0,62; 0,84]	> 0,84

<sup>11</sup> Significance of Kolmogorov — Smirnov test for testing normality.





— boys, - - - girls; Error Bars show 95,0% CI of Mean

Fig. 3. Dynamic of socialization during age

Table 3 shows selective descriptive statistics.

There is the only gender difference: girls demonstrate significantly higher socialization in 9 years old. There are no differences in variance neither between age group, nor between sex group. (Fig. 3).

Girls have significant increasing socialization from 4 till 5 years old. All other changes in female groups as decreasing at 7 years old and increasing in 9 years old we can mentioned only as tendencies which need future research.

Changes in male groups are similar. The only difference is that increasing socialization after entering school happens one year later than among girls.

It is interesting to compare correlations between cognitive complexity and socialization in different sex-age groups. In whole sample correlation is 0,208. It is low positive, but if we look at different subgroups, we can see significant differences. Among girls correlations are positive or nonsignificant, which means that higher cognitive complexity higher socialization is and we can be sure that among girls highly likely that there are no cases with chaotic answers.

But among boys situations are different: from negative correlations in the 4 years old till strong positive correlations in 6 and 10 years old. (See table 4).

Table 4  
**Correlations between  $CC_F$  and  $Soc_{COR}$  in different subgroups**

Age	Girls	Boys
4	0,169	-0,459
5	0,169	-0,273
6	0,208	0,778
7	0,458	0,490
8	-0,001	0,146
9	-0,103	0,517
10	0,273	0,783
Total sample	0,208	

Now let's see at the results of several individual respondents as if we were at the place of a counseling psychologist. Below are three different examples. Each data was analyzed by principal component method with rotation varimax.

**Respondent 265.** This is a girl 4 years old.

Cognitive complexity is very low = 0,14. Socialization is high = 0,80.

Low cognitive complexity along with high level of socialization allows saying that it was logically answer (not chaotic). The girl evaluated not only fairy tales' personages and herself, but also significant adults: her parents and her guardian from kinder garden. Only two factors were extracted (see fig. 4 and table 5). So semantic space dimension is 2. And 5 personages (Aibolit, Buratino, Puss in boots, Malvina, Snow Queen and 3 adults) were evaluated identically. These personages were evaluated positively by two factors. That means that the girl does not differentiate positive personages and significant adults. From one side we can conclude that cognitive complexity in the percep-

tion of positive personages is very low (perception of the negative personages is more complex), but all adults are evaluated positively that means general acceptance of adults. This is good news from psychological point of view.

Also notice that the girl did not know Karabas Barabas and evaluated another negative personage Koschey the Immortal<sup>12</sup>. It would be interested to clarify why she said that she had been known Karabas Barabas and in the same time had been familiar with other personages from the story about Buratino can suggest that she was not oriented in this story. Another important moment for psychologist is to ask the girl about Snow Queen who was evaluated positively and belong to the group of positive personages. Discussion about this personage might be very helpful.



Fig. 4. Semantic space of respondent 265

**Factors: loadings and total variance (respondent 265)**

Table 5

% of variance	F1(+)	Loadings	F1(-)	Loadings
86,437	Skillful	0,88	Boastful	-0,88
	Kind	0,88	Sly	-0,88
	Well-behaved	0,88	a Snitch	-0,88
	a Loyal friend	0,88	a Bully	-0,88
	Brave	0,88	Greedy	-0,88
	Clever	0,88		
8,215	<b>F2(+)</b>		<b>F2(-)</b>	
	Cheerful	0,93	a Crybaby	-0,93
	Beautiful	0,80		

<sup>12</sup> He is the character of many Russian fairy tales.

**Respondent 241.** Boy, 4 years old, Cognitive complexity is high =0,62, Socialization is moderate =0,5.

It is possible to say that the boy has a high level of self-criticism. Own positions on the factor 1 and factor 2 are not very high, but in the same time he accepts himself and evaluation by factors 3 и 4 are the highest.

**Conclusion**

This article presents the results of an empirical study aimed at identifying the norms of

cognitive complexity and the measure of socialization for children aged 4—10 with the help of the “Fairytale Semantic Differential” diagnostic technique. We expect this psychosemantic technique to come into wide use for the diagnostic assessment of preschool and primary school children. It can also be used as an efficient tool for screening children with mental and developmental disorders, as well as those likely to develop autism and problems in communication and interpersonal perception.

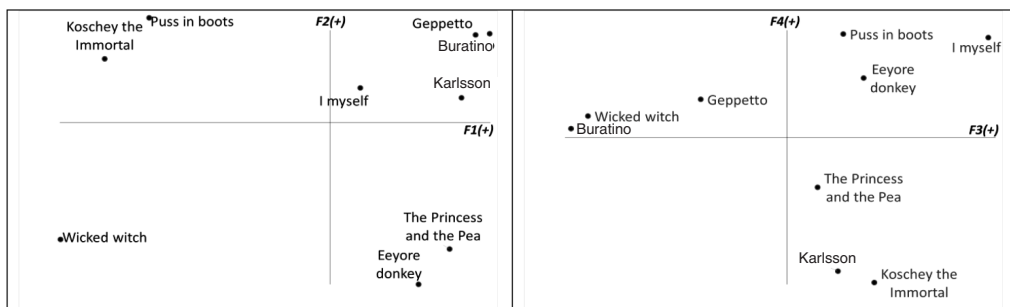


Fig. 5. Semantic space of respondent 241

Table 6

**Factors: loadings and total variance (respondent 241)**

% of variance	F1(+)	Loadings	F1(-)	Loadings
32,284	Beautiful	0,95	Sly	-0,97
	a Loyal friend	0,95		
	Kind	0,93		
20,197	<b>F2(+)</b>		<b>F2(-)</b>	
	Cheerful	0,94	a Snitch	-0,96
	Brave	0,60		
18,274	<b>F3(+)</b>		<b>F3(-)</b>	
	Well-behaved	0,78	a Bully	-0,65
	Boastful	0,74		
	Clever	0,70		
16,633	<b>F4(+)</b>		<b>F4(-)</b>	
	Skillful	0,94	Greedy	-0,70
			Naughty	-0,59

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## Методика «Сказочный семантический дифференциал»: диагностические возможности

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Методика «Сказочный семантический дифференциал», выполнение которой предусматривает, что респондент должен оценить фиксированный набор сказочных персонажей по набору личностных характеристик, была разработана для индивидуальной работы психолога с детьми 4—10 лет. Личностные характеристики, по которым оцениваются персонажи, сформулированы теми словами, которыми взрослые пользуются в общении с детьми этого возраста. Интегральный анализ отношения ребенка к персонажам позволяет определить специфику его морально-ценностной сферы. В статье обсуждаются количественные показатели, которые могут быть вычислены, исходя из тех ответов, которые были даны респондентом на вопросы методики. Эти показатели характеризуют отношение ребенка к себе и другим, размерность категориального пространства межличностного восприятия, содержание и иерархию этих категорий, уровень самооценки и меры социализации. В статье представлены результаты эмпирического исследования. Обсуждаются половозрастные различия когнитивной сложности межличностного восприятия и социализации. В каждой половозрастной группе для каждого показателя вычисляются границы, определяющие его «нормальную» выраженность. Рассматриваются примеры индивидуальных семантических пространств.

**Ключевые слова:** психосемантика, репертуарные решетки, «Сказочный семантический дифференциал», тест когнитивных способностей, когнитивная сложность, социализация, межличностное восприятие, половозрастные нормы, дети 4—10 лет.

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