Sprachstandstest Russisch für mehrsprachige Kinder

Russian language proficiency test for multilingual children

Русский язык — тест для мультилингвальных детей

MANUAL —— ENGLISH

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1 Description of the Test

1.1 General Description

The Russian language proficiency test evaluates the Russian language proficiency of multi-lingual children in the following areas:
- productive and receptive lexicon for verbs and nouns
- production of morphological inflection on verbs
  (first- and second-person singular present)
- production of case on nouns (accusative and dative)
- understanding of grammatical constructions on the sentence level.

It was originally conceived for Russian-German bilingual children but is suitable for any bilingual children who have Russian as their first language. The test incorporates a linguistically and psycholinguistically based procedure for the evaluation of language proficiency for scientific, therapeutic, and pedagogical purposes. It should be administered by a competent—ideally native-speaker of Russian.

For the interpretation of the test results, we have made preliminary normative data available. At this point in time there is no standardization for the test which fulfils the demands of the classical test theory.

1.2 Target group

The Russian language proficiency test is aimed at understanding the language proficiency of children who acquire Russian outside Russia as their first language or as one of two or more first languages.

The procedure is suitable for children three years or older. Normative data are at present available for children from 3;0 to 6;01, or from 3;0 to 6;11, depending on the sub-test. The exact normative data from the various sub-tests is given in Section 1.3.

1.3 Normative data

For the interpretation of the test results, data from a large number of children are available for the various sub-tests. These data allow a direct comparison of the proficiency of an L1 Russian bilingual child with the proficiency of other L1 Russian bilingual children of the same age. Thus, the language proficiency of an individual child can be measured against bilingual age-specific norms.

The children in the normative sample are predominantly children with immigrant backgrounds, both of whose parents are native speakers of Russian. Linguistic and non-linguistic developmental disorders were excluded from the control population based on case history data.

The following norms are based, depending on the sub-test, on the data from 75 to 150 children of different age groups. An exact listing is presented in Table 1.

To compare the elicited values in the individual sub-tests with the normative data, use the evaluation grids given in Section 4. The grids are based on the raw values of the control subjects in the individual age groups. The normal range and the subnormal ranges were defined based on the means and standard deviations of the age groups. Values that are up to one standard deviation above or below the mean (the thick line in the evaluation grid)
are scored as within the normal range. Scores more than one standard deviation above the mean are scored as above average. Scores more than one but less than two standard deviations below the mean are scored as subnormal. Values more than two standard deviations below the mean are scored as severely subnormal.

1.4 Methods and linguistic composition of the sub-tests Lexicon

Children’s lexical knowledge is examined through a selection of stimuli with graded degrees of difficulty.

Both the receptive and the productive lexicon are examined with an equal number of nouns and verbs. Both these parts of speech are considered especially indicative of the development of the lexicon. For the assessment of the language proficiency of bilingual children, it seems that the verbs have exceptional relevance (Jeuk, 2003; Karasu, 1995; Ott, 1997).

1.4.1 Productive Lexicon

The productive lexicon is tested through a picture-naming task. This sub-test is divided into two parts: naming of nouns and naming of verbs. Each part consists of two training items and 26 test items per part of speech.

The following factors were considered in choosing nouns for the test:

- unambiguous identifiability of the pictures
- frequency of the item (high-, mid- and low-frequency)
- semantic field
In choosing the test verbs, we considered language-specific peculiarities of verbs in Russian which influence the acquisition of Russian in monolingual and bilingual contexts, as well as general psycholinguistic criteria. In summary, the verbs for the test were chosen based upon:

- unambiguous identifiability of the pictures
- frequency of the item (high-, mid- and low-frequency)
- semantic field
- the lexical-grammatical category of aspect

The unambiguous identifiability of the chosen depictions of nouns and verbs was tested through a sample of monolingual Russian adults (n=44). Only pictures that were named identically by at least 80% of these adults were used. For some items, several reactions were admitted as correct responses. These are noted on the record forms. For the verbs, there are also detailed evaluation guidelines concerning different morphological variants. These are given in Appendix 7.1.

The frequency of nouns and verbs was ascertained from two sources:

1. from the *Frequency dictionary for Russian* (Sharoff)
2. from the longitudinal data of the Gagarina Corpus (Gagarina, 2008). These longitudinal data encompass over 350,000 tokens from parent-child communication in middle-class families in St. Petersburg. The children ranged in age from the production of their first word until 5.

The consideration of different semantic fields should ensure that vocabulary from various situations is tested. In this way we take into account the observation that bilingual children use their separate languages in limited sets of situations (Oller, Cobo-Lewis & Pearson, 2004; Oller, Pearson & Cobo-Lewis, 2007).

An important attribute of Russian verbs is the lexical-grammatical category of aspect (Bondarko, 1983; Bondarko, 1990; Comrie, 1976; Dahl, 1985). Imperfective and perfective verbs form aspectual pairs, which can be treated either as two forms of a lexeme or as separate lexemes (Bogdanov et al., 2009; Gagarina, 2004; Lehmann, 1993; Švedova, 1980). Monolingual children use aspectual forms correctly by the age of two, while bilingual children make unique errors in choosing between the members of aspectual pairs (Gagarina, Armon-Lotem & Gupol, 2006). In the construction of the test both perfective and imperfective verbs were used. For the four perfective verbs, the imperfective variants are also allowed as correct reactions. For one so-called unidirectional verb *bežat’* “run – unidirectional” its non-unidirectional correlate *begat’* is admitted (Gagarina, 2009; Isačenko, 1968; Murav’ěva, 1980; Saxmatov, 1941; Vinogradov 1972). The list of test items is given in Appendix 7.1.

This sub-test enables:

1. the determination of a reference value for comparison with an age-specific norm through quantitative analysis
2. the determination of the type of incorrect reaction and thus conclusions about the cause of naming problems as well as the assessment of articulatory and phonological problems through qualitative analysis
1.4.2 Receptive Lexicon

The understanding of individual words is tested through a picture-selection task. For each auditory presented test word, the correct picture must be chosen from a group of four pictures. The three distracters are composed of a semantically-related, a phonologically-related, and an unrelated item of the same part of speech.

This sub-test is divided into two parts:
1. understanding of nouns, consisting of one training item and 10 test items
2. understanding of verbs, consisting of two training item and 10 test items

The list of test items and distracters, as well as their classification, is given in Appendix 7.5.

These test items are composed of words of various levels of frequency which have already been tested in the sub-test Language production: Lexicon.

Thus, this sub-test offers two insights. It enables:
1. the determination of a reference value for the extent of the receptive lexicon in comparison with an age-specific norm through quantitative analysis
2. the analysis of the cause of comprehension problems (through the grading of the choice of distracters) as well as the cause of naming issues in the sub-test Language production: Lexicon through qualitative analysis

Because of the parallel nature of the items in the receptive and productive lexicon tests, the following should be noted:
1. The sub-test Perception: Lexicon may not be administered before the sub-test Production: Lexicon, as the former would positively influence the results of the latter.
2. The sub-test Perception: Lexicon can be omitted when the bold italicised items in the sub-test Production: Lexicon have been identified entirely correctly. As comprehension develops much faster than production especially in the acquisition of the lexicon (e.g. Fenson et al., 1994), it can be assumed that, if the items have been correctly named, they should also be understood without any problems.

1.5 Methods and linguistic composition of the morphological sub-tests

In the area of morphology, the production of case on nouns and the production of inflection on verbs are tested by elicitation methods. A description of the task administration is given in Section 2.2 (for case) and Section 2.4 (for verbal inflection).

1.5.1 Case

For testing production of case, only the accusative and the dative were chosen from the six cases of Russian. These cases play the crucial role in spoken German. Both cases are used by monolingual Russian-speaking before the age of three (Gagarina & Voeikova, 2009). An administration of the following sub-test with 20 three-year-old monolingual Russian children in St. Petersburg showed that these subjects performed at ceiling in the test. Thus, the test is suitable for measuring language proficiency in spontaneous speech.
The case sub-test consists of 2 training questions and 6 elicitation questions. Three of the questions elicit the accusative and three the dative case. The test items include two feminine nouns of the second declension and four masculine nouns of the first declension (Švedova, 1980). Only German-Russian cognates were used as test items, in order to eliminate null reactions due to lexical gaps. The Russian words used also have cognates in English and some other European languages.

The list of the test items and their properties as well as the elicitation questions and the expected correct reactions are given in Appendix 7.2.

This sub-test enables:
1. the determination of a reference value for comparison with an age-specific norm through quantitative analysis
2. the determination of differences in case formation proficiency in the accusative and the dative through qualitative analysis

1.5.2 Verbal inflection

Verbal inflection proficiency is tested for the first and second-person singular imperfective present. The test consists of 2 training items and 6 test items.

Three of the test verbs belong to the first productive class, the other three to unproductive groups (Dressler & Gagarina, 1999; Švedova, 1980). The chosen verbs do not differ in the inflection. The differences between the productive class and the unproductive groups consist in stem mutation in the formation of finite forms. Although inflectional endings in both monolingual and bilingual acquisition are produced as in the target language at three to five months after the start of verb production (Gagarina, 2003; Gagarina, 2008; Kiebzak-Mandera, 2000), the stem mutation of the first productive class is overgeneralised to unproductive groups even up to elementary school age (Ceytlin, 2000; 2009). The formation of the correct stem alternations for the unproductive groups is thus a sign of a high level of language proficiency even among monolingual children.

The list of test items and their properties and the expected correct reactions is given in Appendix 7.4.

This sub-test enables:
1. the determination of a reference value for comparison with an age-specific norm through quantitative analysis
2. the determination of differences in verb inflection proficiency between the first and second-person singular, as well as between verbs in the productive class and the unproductive groups through qualitative analysis

1.6 Methods and linguistic composition of the sub-test of sentence comprehension

This sub-test examines the comprehension at sentence level of grammatical constructions which are marked by inflection, function words1, and position in the sentence. It is composed as a picture-selection test based on the TROG-Test (Bishop, 1983; Fox, 2006).

Comprehension of a particular grammatical construction is tested in blocks of two sentences. Constructions were chosen that are pertinent to Russian and are relevant in the acquisition of Russian (Ceytlin, 2000; Gagarina, 2008; Gvozdev, 1949).
The following 11 constructions were tested.
1. 2-element sentences
2. 3-element sentences
3. aspect
4. negation
5. personal pronouns
6. relative clauses
7. double object constructions
8. topicalisation
9. subordination
10. prefixing of verbs
11. passive voice

For the construction and depiction of the sentences a limited set of high-frequency content words was used. For every auditory-presented test sentence, the correct picture must be chosen from a group of four pictures. The three distracter pictures exhibit minimal grammatical or lexical differences to the target sentences. The list of test items and distracters is given in Appendix 7.3.

This sub-test allows:
1. the determination of a reference value for comparison with an age-specific norm through quantitative analysis
2. the identification of which constructions cause special problems, as well as the identification of these problems (by the evaluation of incorrect responses) through qualitative analysis
2

Administration and evaluation of the sub-tests

**ORDER OF THE SUB-TESTS**
The following order is recommended for the administration of the sub-tests.

1. Production: Lexicon
   1.1 Nouns
   1.2 Verbs
2. Production: Case
3. Perception: Grammatical constructions
4. Production: Verbal inflection
5. Perception: Lexicon
   5.1 Nouns
   5.2 Verbs

The suggested order is based on experience, which has shown that children find this order the most varied and least tiring. The order of the tests is fixed only insofar as the test Production: Lexicon must be administered before the test Perception: Lexicon (for an explanation see Section 1.4.2).

**GENERAL CONSIDERATIONS**
The experimenter should speak only Russian with the child before and during the test in order to make it possible for the child to shift to a maximally monolingual Russian mode. The order of the items in the individual sub-tests should not be altered.

### 2.1 Production: Lexicon

**METHOD**
Picture-naming: first the naming of nouns, then the naming of verbs.

**INSTRUCTIONS FOR NOUNS**
*Now I’ll show you some pictures. Look at them carefully and tell me what they are.*

**INSTRUCTIONS FOR VERBS**
*Now I’ll show you some pictures. Now tell me what’s happening in the picture.*

**TEST ADMINISTRATION**
The pictures are shown one after the other. A new picture should not be shown until the child reacts. A reaction may be elicited with the following questions.
- Elicitation question for nouns: *What’s this?*
- Elicitation question for verbs: *What is/are he/she/they doing?* or *What’s happening here?*

If the reaction is not in Russian, but rather in the other language, the Russian equivalent is asked for (after the first reaction is recorded on the record forms). In the case of a null reaction (e.g. *I don’t know*), the experimenter may repeat the question. If no reaction can be elicited, the test continues to the next item.

**TERMINATION CRITERION**
none
**RECORDING AND EVALUATION**

Reactions are scored on the record form as either correct (1) or incorrect (0).

Correct reactions for nouns are:
- the noun on the record form
- a phonetically or phonologically changed form of the noun on the record form
- inflected forms and diminutives of the noun on the record form

Correct reactions for verbs are:
- the verb on the record form
- a phonetically or phonologically changed form of the verb on the record form
- the inflected forms and morphological variants given in Appendix 7.1

Single self-corrections are allowed and should be scored as correct responses. Null reactions are scored as N. False reactions and phonetically or phonologically altered forms should be written down in order to allow for qualitative analysis.

### 2.2 Production: Case

**METHOD**

Elicitation test: elicitation sentences are given on the record form.

**TEST ADMINISTRATION AND INSTRUCTIONS**

**INTRODUCTION**

The child will first be presented with the circus and its inhabitants. The experimenter uses all test items only in the nominative.

*Here is a circus. There’s a clown, and a lot of animals. Here’s a lion, an elephant, a monkey, a snake, a tiger, a panther, a giraffe, a zebra and a crocodile. There are friends in the zoo. I’ll show you!*

**TRAINING PHASE**

On the basis of the training items it will be made clear which reaction is expected. Take the four puzzle pieces, put them together in pairs, and say:

*Here are the lion and the monkey. They are friends. The snake and the elephant also like each other.*

Here, too, use all test items only in the nominative. Then take the pieces apart and ask the question:

*Who does the lion like?*

The child should answer the question and put the puzzle pieces together again. If the child responds without case marking, ask the elicitation question again (this requires realisation of case); this time, stress the question word.

**EXAMPLE**

Experimenter: *Komu nravitsja lev?*

*Who does the lion like?*

Child: *Obez’jana — NOM (incorrect)*

*(The) monkey — NOM*

Experimenter: *Poslushaj vnimatel’no vopros: komu nravitsja lev?*

*Listen to the question carefully: Who does the lion like?*

Child: *Obez’jane — DAT (correct)*

*(The) monkey — DAT*
After the child’s second response (whether correct or incorrect), the correct response should be confirmed:

Pravil’no, obez’jan.
Yes, the monkey.

The second training item should then be conducted in the same fashion. In the case of a non-verbal or shortened response (e.g. That one), the elicitation question should be strengthened:

Tell me, who he likes! I’m not looking!

TESTING PHASE
Three puzzles are presented, with 2 circus inhabitants each.
The circus inhabitants should be named again, in order to exclude lexical problems:
The clown and the giraffe are friends, the zebra and the panther too, and the crocodile and the tiger like each other.
Still the experimenter should use all test words only in the nominative. The puzzle pieces are then taken apart and shuffled (right-side up):
Now I’m shuffling the puzzles and you can put them back together. But first I’m going to ask some questions, just like we practiced.
After three elicitation questions, the puzzles will be mixed again, and further questions will be asked (cf RECORD FORM Production: Case).
In the case of incorrect case realisation, the question may be asked again. If the child does not recognise the item, the experimenter may name it again (in the nominative) and then ask the question again.

TERMINATION CRITERION
The child has produced no case forms (besides the nominative) for the first three elicitation questions.

RECORDING AND EVALUATION
Reactions are scored on the record form as either correct (1) or incorrect (0).
The target item with correct case inflection is to be scored as correct, as on the record form in parentheses (underlined and italicised). First declension animate nouns show the inflection -a in the accusative and -u in the dative. Second declension nouns show the inflection -e (pronounced unstressed as [i]) in the dative.
Null reactions are scored as N. False reactions and phonetically or phonologically altered forms should be written down in order to allow for qualitative analysis. Single self-corrections are allowed and should be scored as correct responses.

2.3 Perception: Grammatical constructions

METHOD
Picture-selection test with auditory sentence-presentation

INSTRUCTIONS
I’m going to show you some pictures and tell you what is happening. Look at the pictures carefully and show me where what I said is happening.

TEST ADMINISTRATION
For each sentence, a sheet of paper with four pictures is shown, and the sentence is pronounced clearly and slowly. The test does not move forward until the child responds. A response is recorded when the child clearly points to a picture.
If the child hesitates for a long time, or if the reaction is unclear (e.g., if the child points to several pictures), the sentence is to be repeated and the child told to point to only one picture. If the child still points to several or to no pictures, the test continues with the following item.

**Termination criterion**

none

**Recording and evaluation**

The pictures are coded in the record form as A, B, C, and D. A and B are at the top, C and D are at the bottom (from left to right) from the child’s perspective. The experimenter, who as a rule sits opposite the child, has of course a mirror-image view (depicted on the record form).

Distracter pictures have indices (\(A_\text{G} \) — grammatical distracter, \(A_\text{L} \) — lexical distracter; \(A_{\text{Mix}} \) — lexical-grammatical distracter). Target pictures are depicted on the record form in bold and without index.

The child’s reaction is recorded by circling the corresponding letter. One-time self-corrections are allowed and are not separately noted on the record form. Null reactions are recorded as N; pointing to several pictures is recorded as M.

The correct responses (recognisable as bold letters without indices) are subsequently scored as 1 in the right column and added up for quantitative analysis. Incorrect responses are scored as 0 and can be added up by type of distracter for a qualitative analysis.

### 2.4 Production: Verbal inflection

**Method**

Elicitation test: elicitation sentences are given on the record form

**Extra materials**

In order to perform the test, additional objects are needed:

- for the action *cut* — scissors and paper or something similar which can be cut,
- for the action *write* — a piece of paper and a pen, pencil or something to write with,
- for the action *close* — a small box with a lid,
- for the action *take* — something that can be taken,
- for the action *play* — a couple of small toys,
- for the action *read* — a small book or something that can be read.

This material should be put together by the experimenter. The exact description of the test execution is given in the record form *Production: Verbal inflection*.

**Test administration and instructions**

**Introduction**

First it is explained to the child how the sub-test functions.

*We are playing theatre and everybody has to do something.*

**Training phase**

The target verbs are always used in the infinitive in the presentation of the task.

*I have to bark and you have to hop. Let’s start, and then you tell me who is doing what. Look, my task is “to bark” and your task is “to hop.”*

Then the tasks are performed. The elicitation question follows:

*Who is doing what?*
The expected response is:

I am hopping and you are barking.

If the child responds non-verbally or in the infinitive, the expected reaction will be repeated by the experimenter and the training phase will be repeated.

**Testing Phase**

Verbs are named in the presentation of the task in the infinitive, as is noted on the record form. The actions are carried out one after the other. The response of the child is elicited by the question:

*Who is doing what?*

After three verbal pairs, the tasks will be switched:

*Now we're going to do everything opposite, now my task is “to write a letter” and your task is “to cut paper”.*

Thus each verb will be produced with both target inflections. In the case of a non-response, the question *Who is doing what?* is repeated. If the child still does not respond, move on to the next item.

**Termination Criterion**

The child has not yet reacted with an inflected verb after the first three test pairs.

**Recording and Evaluation**

Reactions are scored on the record form as either correct (1) or incorrect (0).

Correct reactions are:

- the correct form of the verb noted on the record form (underlined and italicised)
- a different appropriate verb which is not a target item but is correctly inflected
- for verbs of the unproductive groups, forms with incorrect stems but correct endings (admitted forms are given in Appendix 7.4)

Null responses are scored as N. Responses which are different from those on the record form should be written down in order to allow for qualitative analysis. One-time self-corrections are allowed and will be scored as correct responses.

**2.5 Perception: Lexicon**

This sub-test can be left out if all bold and italicised items in the test Production: Lexicon have been correctly named (see Section 1.4.2 for explanation).

**Method**

Picture-selection test with auditory presentation of words: first comprehension of nouns is tested, then comprehension of verbs

**Instructions**

I'll show you some pictures and say a word. Look at the pictures carefully and show me where you see what I say.

**Test Administration**

For each word, a sheet of paper with four pictures is shown and the target word is clearly pronounced. The test does not continue to the next item until the child responds. A response is recorded when the child clearly points to a picture.

If the child hesitates for a long time, or if the reaction is unclear (e.g. if the child points to several pictures), the sentence is to be repeated and the child is told to point to only one picture. If the child still points to several or no pictures, the test continues to the next item.
At the switch from the Nouns part of the test to the Verbs part of the test, the child is told:

*Up to now you had to show me things. Now you should show me what someone is doing or what is happening.*

**Termination criterion**

none

**Recording and evaluation**

The pictures are coded in the record form as A, B, C, and D. A and B are at the top, C and D are at the bottom (from left to right) from the child’s perspective. The experimenter, who as a rule sits opposite the child, has of course a mirror-image view (depicted on the record form).

Distractor pictures have indices (A_P—phonological distracter, A_S—semantic distracter, A_U—unrelated distracter). Target pictures are depicted on the record form in bold and without index.

The child’s reaction is recorded by circling the corresponding letter. Single self-corrections are allowed and are not separately noted on the record form. Null reactions are recorded as N; pointing to several pictures is recorded as M.

The correct responses (recognisable as bold letters without indices) are subsequently scored as 1 in the right column and added up for quantitative analysis. Incorrect responses are scored as 0 and can be added up by type of distracter for a qualitative analysis.
3 Evaluation

3.1 Quantitative evaluation

The following raw values are calculated based upon the number of correct responses:

1. Sum of Production: Lexicon in total (Nouns and Verbs)
   1.1 Sum of Production: Lexicon Nouns
   1.2 Sum of Production: Lexicon Verbs
2. Sum of Production: Case
3. Sum of Perception: Grammatical constructions
4. Sum of Production: Verbal inflection
5. Sum of Perception: Lexicon in total (Nouns and Verbs)
   5.1 Sum of Perception: Lexicon Nouns
   5.2 Sum of Perception: Lexicon Verbs

The criteria for evaluation a response in the various sub-tests as correct are given in §§ 2.1–2.5 under Recording and Evaluation.

The raw values of the investigated child for each test should be recorded with an X in the evaluation grid for the appropriate age. Thus an assessment can be read directly as:

- above average (dark grey area in evaluation grid)
- normal (white area in evaluation grid)
- subnormal (light dark grey area in evaluation grid)
- severely subnormal (black area in evaluation grid)

This assessment emerges from the raw values of the controls in the individual age groups. Values that are up to one standard deviation above or below the mean (the thick line in the evaluation grid) are scored as within the normal range. Scores more than one standard deviation above the mean are scored as above average. Scores more than one but less than two standard deviations below the mean are scored as subnormal. Values more than two standard deviations below the mean are scored as severely subnormal.

For three-, four- and five-year-old children the norms for all the sub-tests are available, for six-year-olds only those for the sub-tests Production: Case and Production: Verbal inflection.

The norms for the sub-tests Production: Lexicon, Perception: Grammatical constructions and Perception: Lexicon for five-year-old children are, however, based on the results of a test of children in the age range 5;0—6;01 (§ 1.3). Therefore, these results can be used for children who have recently turned six.

3.2 Evaluation of a terminated test

The sub-tests Production: Case and Production: Verbal inflection are terminated if the target answers cannot be elicited after a certain number of test items. The normative data contain only the results of children who completed the test in full.
On the basis of the data collected so far, a terminated test is to be graded thus:
- more than 35% of tests terminated within age group:
  termination of the test indicates normal language proficiency
- 35%—5% of tests terminated within age group:
  termination of the test indicates subnormal language proficiency
- less than 5% of tests terminated within age group:
  termination of the test indicates severely subnormal language proficiency

A terminated test is to be marked in the indicated field on the evaluation grid for the respective tests. The age-specific assessment of the termination is given there.

3.3 Qualitative evaluation

A qualitative evaluation of test results is possible. In sections 1.4 — 1.6 indications are given of what further information such analyses can supply. However, in this version of the test no evaluation grid or interpretation guidelines have been made available for qualitative evaluation.
References


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