



# Validating a Language Sampling Protocol for Bilingual Russian-English Children Under the Age of Seven

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## Introduction

• As the population of Russian-English speaking children in the tri-state area grows (Ortman & Shin, 2011), particularly in New Jersey (U.S. Census Bureau, 2009), so does the need for Speech Language Pathologists to recognize and evaluate a true language disorder versus a language difference.

• There are many standardized assessments that are available for English speaking children who are suspected to have a language or speech disorder. However, no such standardized tests are available for the bilingual Russian-English speaking population, therefore clinical expertise must be harnessed to describe language development in bilingual Russian-English speaking children.

• According to Shipley and McAfee (2015), when evaluating a bilingual child, data from multiple sources is warranted, including: complete developmental history from parents, education history (if the child is of school age), observation of communication and play skills, and a language sample. Because the language samples must be collected in both languages, clear guidelines must be present for accurate language sampling.

• According to Kester (2014) Russian speaking children ages five and up should be utilizing all of the rules of the language, including gender, inflections, and numbers for nouns, verbs and pronouns. The same is expected of English speaking children (Lahey, 1988; Retherford, 2000; Shipley & McAfee, 2015). It is unclear that this is the case for simultaneously developing bilingual children.

• This research project aims to validate a language sampling protocol for typically developing bilingual Russian-English speaking children under 7 years old in the tri-state area using a three point data collection:

- Parent interview and Questionnaire
- Structured and unstructured language sampling
- Standardized vocabulary testing in English

The **hypothesis** is that the protocol designed for the assessment of participants will serve as a valid and reliable method of assessment for both English and Russian languages. This will be demonstrated by being able to describe achievement in both languages and repeat the findings 4 to 6 months later.

## Sample

N = 2	Round 1	
Participant	RE01	RE02
Age	5 years, 7 months	5 years, 2 months
Gender	Male	Female
Mother's Ed	16 years	16 years
Child's Ed	Kindergarten	Preschool
<b>Peabody Picture Vocabulary Test</b> <small>Fourth Edition (Dunn &amp; Dunn, 2007)</small>		
Standard Score	93	94
<b>Expressive Vocabulary Test</b> <small>Second Edition (Williams, 2007)</small>		
Standard Score (English Only)	106	99
Standard Score (Conceptual Scoring)	112	110
<b>Language Samples (# of Utterances Obtained)</b>		
Russian	165	190
English	214	194
<b>Alberta Language and Developmental Questionnaire</b> <small>(ALDeQ; Paradis et al. 2010)</small>		
Parent Report Score	15.5/36 = 0.43	32/36 = 0.89

## Procedures

• Two children recruited for this study participated in two sessions of data collection: one conducted in Russian and one in English. A follow-up session (Round 2) is slated for 4 to 5 months from initial evaluations reported here.

• Three points of data collection were utilized to account for all aspects of bilingual language development:

- Parent interview and Questionnaire for bilingual parents (ALDeQ; Paradis et al. 2010)
- Structured and unstructured language sampling procedures (Lahey, 1988; Retherford, 2000)
- Standardized vocabulary testing using conceptual scoring (Restrepo et al. 2013)

• Language samples were analyzed for language measures common across languages at the word, sentence, and discourse levels. Measures selected were chosen for comparison across languages.

- Content: Type Token Ratio (TTR)
- Form: Mean Length of Utterance (MLU), words
- Use: Function Categories (Lahey, 1988)

## Discussion

• This study allowed for observation of Russian and English language milestones in typically developing bilingual children as the first step in validating a three-point approach to assessing language development in young bilingual children.

• The coding system applied to the language transcripts allowed for description of language content, form and use in both English and Russian. Parent questionnaire about language use and standardized testing in English, using conceptual scoring, supplied additional information about language development.

• Findings about **language form** include:

- Higher MLU in Russian for both children
- For Participant 1 - longest utterance found in structured book activity in English suggesting longer exposure to English book reading activities
- For Participant 2 - longest utterance found in free play activity in English suggesting shorter exposure to structured activities in English (i.e., books)

• **Language content** analysis revealed that a higher proportion of different words were used in Russian by both children and is corroborated by conceptual scoring of standardized vocabulary test and parent report of language exposure; both children had more experience speaking Russian language.

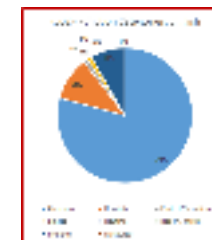
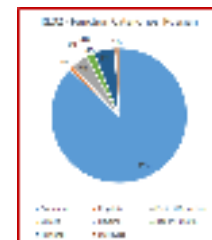
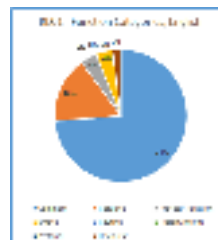
• Conceptual scoring (Restrepo et al. 2013) for EVT2 accounted for vocabulary knowledge across languages and results indicated both children's combined word knowledge was greater than English word knowledge alone. This indicates that they had a conceptual understanding of the picture stimuli but could only demonstrate that when allowed to use both languages.

• For **language use** the most frequently observed function category in both English and Russian was commenting. More pretend categories occurred in the unstructured play in Russian, which suggests more imagined scenarios. This indicates that young children in this sample were using language for similar functions, regardless of the language.

## Results

RE01	Russian	English
TTR	239/543 = 0.44	210/677 = 0.31
MLU	6.43 (4.96) Range = 1 to 23	6.34 (5.29) Range = 1 to 31
EVT2; R_Score	82	76

RE02	Russian	English
TTR	221/368 = 0.60	151/397 = 0.38
MLU	3.77 (3.58) Range = 1 to 23	4.07 (4.19) Range = 1 to 29
EVT2; R_Score	63	74



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