Title of presentation: Preschool bilinguals *at risk* for SLI: composite effects of language proficiency, narrative and repetition tasks

Abstract proposal for:

- ♣ **Oral presentation**
- ♣ **Poster**

Preschool bilinguals at risk for SLI: composite effects of language proficiency, narrative and repetition tasks

The goal of this study is to identify clinical markers for successive preschool Russian-German bilinguals at risk for SLI and establish linguistic measures, which classify them into subtypes. For this purpose more than 150 children with the mean age 4;7 (age range 4;0 to 4;11) underwent tests on cognitive and IQ development, extensive language proficiency tests in both languages as well as LITMUS tasks. In particular, the following tasks were performed in both languages:

Linguistic tasks: production and perception of lexical items (Kauschke & Siegmüller 2010), perception of sentences (Gagarina et al. 2010; Fox 2011), LITMUS-MAIN;

Verbal memory tasks: Russian and German NWR and SR Task (the latter was adapted from SASIT-56 Marinis et al. 2011) with increasing complexity of sentence structures, 30 sentences for each language;

Nonverbal memory tasks: Pairwise comparison of melodies and rhythms (adapted from Sallat 2008).

Analyses: Overall language proficiency reflects the average language proficiency in both languages, which was determined by transferring language proficiency subtests in Russian and German on a z-scale and calculating the mean for each language. Children that scored within the lowest quartile in overall language proficiency (LP) were classified as being at risk for SLI. This way 16 children at risk were identified. In the similar way the group of HP was identified. The group of HP (high proficiency) children included 11 children (7 girls, 4 boys) with the mean age of 57.3 months and the LP (low proficiency) group included 16 children (8 girls, 8 boys) with the mean age 57.1 months. The Welch Two Sample t-tests showed that the two groups differ significantly in language skills (p = 0.000, df = 14,96, t = 4.675), but not the IQ (p=0.06), which was between 83 and 120.

Preliminary results show high levels of sensitivity in nonword- and sentence repetition tasks. This corroborates previous findings of e.g. Armon-Lotem, 2012 who showed that NWR and SR are promising clinical markers for the identification of successive bilinguals with SLI. No difference between TD children and children at risk for SLI were found in nonverbal (musical) skills. Yet this outcome may change with children's age.

For the narratives, significant differences were found between the HP and LP groups only for the comprehension part of the task (HP: mean = 5.75 (SD 1.67) and LP: mean = 3.8 (SD 2.39): t = 2.2806, df = 19.231, p-value = 0.034).

Testing will be continued in 6-months intervals to determine which children at risk will develop SLI and also to further assess which other measurements (e.g. story (re)telling) are suitable for the identification of SLI in preschool aged bilinguals.

References

Fox, A. (ed.) (2011). *Test zur Überprüfung des Grammatikverständnisse*s (TROG-D). 5. Auflage, Idstein: Schulz-Kirchner Verlag.

Gagarina, N., Klassert, A. & Topaj, N. (2010). *Sprachtest Russisch für mehrsprachige Kinder.*

ZAS Papers in Linguistics 54. Berlin: ZAS.

Kauschke, C. & Siegmüller, J. (2010). *Patholinguistische Diagnostik bei Sprachentwicklungsstörungen*. München: Urban & Fischer Verlag.

Marinis, T., Chiat, S., Armon-Lotem, S., Piper, J. & Roy, P. (2011). Sentence Imitation Test-E32, www.bi-sli.org

Sallat, S. (2008). Musikalische Fähigkeiten im Fokus von Sprachentwicklung und Sprachentwicklungsstörungen. Idstein: Schulz-Kirchner.