[Phenotyping specific language impairment in kindergarten children]

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OBJECTIVE
For phenotyping specific language impairment (SLI) in kindergarten children in clinical practice and research issues, we need a valid diagnostic method for dichotomous classification (language impaired, normal developing).

PATIENTS AND METHODS
27 kindergarten children belonged to SLI-group, 36 to control-group. The diagnostic accuracy of a composed language test battery was examined in comparison to a clinical assessment. The test battery was composed of 8 subtests of German norm-referenced, standardized tests.

RESULTS
Several discriminant analyses showed acceptable levels of accuracy with over 80% for sensitivity and specificity. Using a single subtest the subtest "Phonologisches Arbeitsgedächtnis für Nichtwörter" (phonological short-term memory of nonwords) from Sprachentwicklungstest für drei- bis fünfjährige Kinder (SETK 3-5; Grimm, 2001) showed best classification rates between the two groups using a Cut-off point of -0.39 SD. Means of the 8 used subtests showed significant differences for the two groups.

CONCLUSION
The described method for phenotyping SLI can identify children with normal language and those with impaired language with acceptable levels of diagnostic accuracy. When using a norm-referenced standardized test for the assessment of language abilities, it is important to have empirically derived information about diagnostic accuracy (sensitivity, specificity, Cut-off score).