The assessment of metalinguistic development from age 9 to 14. Structure and psychometric characteristics of mat-2. (metalinguistic ability test n.2)

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The aim of this study is to present the theory, the structure and the psychometric characteristics of a test that controls for metalinguistic development in subjects aged 9 to 14 (the Mat-2, Metalinguistic ability test n.2). The first section describes the structure of the test, which is derived from an original set of four tasks designed by D. Hakes (Hakes, D., 1980, The Development of Metalinguistic Abilities. Berlin: Springer). A few Italian authors introduced a new component: a two-level-awareness metalinguistic analysis to explore language structure. At the first level, the individual may answer on purely intuitive grounds.

This kind of response has been called linguistic (henceforth L), since it is based on the intuitive application of linguistic rules. At the second level, individuals are required to justify their responses on analytic and explicit grounds. The second type of response is properly metalinguistic (henceforth ML), since it intrinsically requires the use of language over and beyond language (hence the prefix "meta"). Overall, the test includes 6 subtests, Comprehension, Synonymy, Acceptability, Ambiguity, Grammatical Function and Phonemic Segmentation, and is now available in English and Spanish version. The term "Mat-2" refers to the existence of a "Mat-1" version for 4 to 6-year-old children. It is based on a similar theoretical assumption, which has been already validated and published.

In the central section of the paper, some major results of psychometric studies are synthesized, namely:

0. norms for score interpretation for each age group;
a. reliability coefficients for each subtest, either for L and ML scores or totals, which all appear satisfactory;
b. cross-rater validity, obtained through correlations with a non verbal test, the Raven PM38, which all appear very significant;
c. discrimination analysis, based on two significant variables: age and sex; the two variables refer to older children and women respectively, differing significantly in ML scores;
d. factor analysis, which shows a clear-cut two-factor structure, consistent with L and ML scores dichotomy.

This result apparently confirms the theoretical distinction between intuitive and implicit language processing, underlying the L answers, and the explicit, analytic language processing, required in ML answers.

The relevance of this distinction appears once again in the sociolinguistic studies carried out through the Mat-2, where different types of Italian bilingual 5th graders (Italian-English, Italian-French, Italian-German types of bilingualism) have been compared to Italian monolinguals, matched by age, sociocultural background and intellectual development. Overall, bilinguals outperform monolinguals, and the most salient differences are typically represented by ML scores, that is to say the metalinguistic domain of the test.

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