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## **PREDICTION OF SUCCESS IN THE SCHOOL BY USING THE PRIMARY MENTAL ABILITIES TESTS**

This work deals with the predictive value research for one group of primary mental abilities' tests of the pupils' success in general and especially of their success in learning native language and mathematics. It also shows the differences between the predictive values of individual tests and samples of pupils from villages and from cities. There are two criteria applied in the tests' selection: a) the subject matter of tests and b) the psychological operations that tests register. We look for some correlation between achievements in the tests and the pupils' success that have been evaluated by the grades for native language, mathematics and general success. The research is conducted on samples of the third and the fourth grade elementary school pupils from urban and rural environments ( $N = 138$ ). The pupils are from schools in Kacer, Ravna, Mackap, Zlatibor and Uzice. The results are the following: 1. Primary mental abilities' tests (perceptive, spacious and verbal) stand for the significant predictors of general success in the school and of success in native language and mathematics. 2. There are some differences between predictive values of the tests. Those differences appear in relation to psychological operations registered by the tests rather than to their contents. 3. The differences between predictive values of the tests appear also when children from urban and rural environments are compared. That is to say that, evidently, tests that register more complex psychological operations are better success predictors of the children who attend schools in the cities, and the ones that register simpler psychological operations are better success predictors of the children from the rural environments. 4. Most of the tests with figural subject matter are more efficient predictors of success in learning the native language than mathematics, which shows that for the prediction of success in the case of individual subjects psychological operations are also more important than the subject matter of the tests.

**Keywords:** primary mental abilities, success in the school, prediction of success in the school

## **PREDIKCIJA ŠKOLSKOG USPEHA POMOĆU TESTOVA PRIMARNIH MENTALNIH SPOSOBNOSTI**

U radu se saopštavaju rezultati provere prediktivne vrednosti jedne grupe testova primarnih mentalnih sposobnosti za školski uspeh učenika uopšte i posebno u maternjem jeziku i matematici, potom utvrđuju se razlike u prediktivnoj vrednosti između pojedinih testova i na uzorcima učenika iz sela i grada. Prilikom izbora testova pošlo se od dva kriterijuma: a) sadržaja zadataka u testovima i b) psiholoških operacija koje testovi registruju. Između postignuća na testovima i uspeha učenika koji je definisan preko ocena iz maternjeg jezika, matematike i opštег uspeha tražene su korelacije. Istraživanje je sprovedeno na uzorku učenika trećeg i četvrtog razreda osnovne škole iz gradske i seoske sredine ( $N = 138$ ). Učenici su iz škola u Kačeru, Ravni, Mačkatu, Zlatiboru i Užicu. Rezultati su bili sledeći: 1. Testovi primarnih mentalnih sposobnosti (perceptivnih, prostornih i verbalnih) se mogu smatrati značajnim prediktorima školskog uspeha uopšte i uspeha u maternjem jeziku i matematici. 2. Postoje razlike između testova u pogledu prediktivne vrednosti. Te razlike se više iskazuju u odnosu na psihološke operacije koje testovi registruju a manje u odnosu na njihov sadržaj. 3. Razlike u prediktivnoj vrednosti testova se iskazuju i kada se uporede deca iz seoske i gradske sredine. Naime, vidljiva je tendencija da su testovi koji registruju složenije psihološke operacije bolji prediktori uspeha dece iz gradskih škola, dok testovi koji registruju jednostavnije psihološke operacije su, pokazalo se, bolji prediktori školskog uspeha dece iz seoske sredine. 4. Većina testova figuralnog sadržaja ima nešto bolju predikciju uspeha u maternjem jeziku nego matematici što pokazuje da su i u slučaju pojedinih predmeta za predviđanje uspeha bitnije od sadržaja psihološke operacije koje registruju testovi.

**Ključne reči:** perceptivne sposobnosti, prostorne sposobnosti, verbalne sposobnosti, predikcija, školski uspeh