

Logical Intelligence Levels and Math Performance: a Study on Primary and Secondary Chilean Students

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Abstract

This article presents and analyses the results of a Superior Logical Intelligence Test (TILS) to a sample (N = 4446) representative of the Chilean primary and secondary school population. Psychometric analysis shows that the TILS is a one-dimensional instrument with adequate internal consistency. The results of the application to Chilean students reveal significant differences in level of administrative support of the institution students attend (a factor related to socio-economic level). The distribution of the national logical intelligence scores was normal, and it was possible to establish the scales of the differential scores according to age and level of administrative support. The study revealed a positive and meaningful correlation between logical intelligence and overall academic performance, especially in the area mathematics. Likewise, the differences between the general population and a group of talented students (N = 493) were examined, and the latter group was shown to possess significantly higher levels of logical intelligence.

Keywords

Author Keywords: Logical intelligence; Academic performance; Socio-economic level; Age; Gender; Talented students

KeyWords Plus: SOCIOECONOMIC-STATUS; WORKING-MEMORY; PRIMARY-SCHOOL; ACHIEVEMENT; MATHEMATICS; ABILITY; TRAJECTORIES; ADOLESCENTS; KNOWLEDGE; SYSTEM