

Scholar Determinants of Achievement in Indigenous Children of Primary School in the Mexican Republic: A Latent Variable Model

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ABSTRACT

In Mexico the indigenous groups live in a marginal situation, in dispersed places and they experiment great problems in education. The primary education offers at national level with a covering of 95%. Among 5% remaining they are the indigenous and rural groups that live in towns of less than 100 inhabitants.

This research is focused to propose, contrast and validate a model of structural equations to explain the scholar achievement in language and mathematics in children of sixth grade of indigenous primary education. It is applied in nine states of the Mexican Republic.

The data are part of a survey applied by the Secretary of Public Education (SEP) in 23 states of the Republic Mexican. As part of the study two achievement tests were applied (Language and Mathematics) and five questionnaires (students, parents, teachers, principals and characteristic of the school). The sample consisted of 2242 children, 2242 parents, 232 teachers, 218 principals and 218 schools.

The preliminary structural equation model was integrated for 20 latent variables and 42 observed variables that was computed by means of the computer program LISREL. The model was too complex. We proceeded to tune it to make it simpler and more parsimonious. The final model was constituted by three latent exogenous variables and seven latent endogenous variables. The measure variables or observed they were fifteen.

The final model presents a good adjustment and explains 30% of the variance, and the RMSEA is of 0.026 (near to zero) for that is considers appropriate.

The model was validated with two procedures: First, with another sample. Second, by means of the computer program LISREL, with an analysis of multigrup validation. The results obtained have allowed to evidence some factors that possibility the explanation of the scholar achievement in the indigenous primary education in Mexico.