

Intelligence and genetic markers in Chilean children

Valenzuela, Carlos Y.

Pastene, Carolina S.

Pérez, Claudia M.

Genetic markers and total intelligence quotient (IQ) assessed by WISC (Wechsler Intelligence Scale for Children) were studied in children of both sexes from Santiago, Chile. Heterozygous boys for phosphoglucomutase 1 (PGM) and heterozygous girls for haptoglobin (Hp) had lower IQ than homozygotes. For ABO system, B girls had lower and B boys had higher IQ than children with other ABO phenotypes. These differences were highly significant with the two tailed t'-test (Student's t-test with the Welch-Satterthwaite correction for degrees of freedom), and most of them remained significant after the correction for multiple comparisons. Girls had greater variance of IQ than boys. Relationships between homozygotes and heterozygotes were found in two independent studies. Thus, the genetic relationship found here seems likely to be a true biotic effect.