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Improving Perceptual Reasoning in School Children through Chess Training

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Abstract: Perceptual reasoning is the ability that incorporates fluid reasoning, spatial processing, and visual motor integration. Several theories of cognitive functioning emphasize the importance of fluid reasoning. Tasks that require fluid reasoning involve the process of manipulating abstractions, rules, generalizations, and logical relationships. A pretest–posttest with control group design was used, with 43 (28 boys, 15 girls) children in the experimental group and 42 (26 boys, 16 girls) children in the control group. The sample was selected from children studying in two private schools from South India, which included both the genders. The experimental group underwent weekly one-hour chess training for one year. Perceptual reasoning was measured by three subtests of WISC-IV INDIA. Pre-equivalence of means was established. Statistical analyses revealed that the experimental group shows statistically significant improvement in perceptual reasoning compared to the control group. The present study establishes a correlation between chess learning and perceptual reasoning.