

A Cross-Cultural comparison of Visual Perception and Visual-Motor Skills in Typically Developing Palestinian, Israeli and American, Kindergarten Children

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Introduction-

Research has shown that visual-motor skills are associated with functional activities such as hand writing and are essential for succeeding in pre-academic and academic environments. There are a number of standardized instruments in the area of perceptual and visual-motor performance that are widely used by clinicians and researchers for the purpose of screening and evaluation of children. However, findings suggest that standardized tools may not be valid if used to assess persons from a cultural group other than the one that the instrument was standardized on.

Objectives-

The purpose is to examine differences in the visual-motor and visual-perception skills of Palestinian, Israeli and American kindergarten children. It is hypothesized that on average, significant differences in visual-motor and visual perception skills, as measured by the VMI, will be found among the three cultural groups.

Methods-

Subjects: A total of 104 typically developing kindergarten children (30 Palestinians, 36 Israeli and 38 Americans) participated in the study

Instrument: The Developmental Test of Motor Integration (VMI) is a standardized test designed as a screening instrument for early identification of learning difficulties.

Procedures: Translation of the VMI to Arabic with back translation to English was performed by a bilingual OT. Interrater reliability among examiners ranged from 0.85 to 0.95.

Data Analysis: Descriptive statistics (Mean, SD and range) and ANOVA were computed to assess differences among the three cultural groups. Shceffe post-hoc test was performed to prevent type I error. Probabilities of < .05 were considered significant.

Results-

A significant difference ($p=.001$) was found between the Palestinian and the Israeli children in which the Israeli children achieved a higher score. Comparisons pertaining to the performance of the American children are currently being executed.

Conclusions-

Visual-motor performance varies in children from different cultural backgrounds.

Contribution to the Practice-

Given that visual-motor abilities are critical to school readiness, OTS screening kindergarten and the early grades should be aware that children from a cultural group other than the one on whom the instrument was standardized, may achieve significantly lower scores due to differences in cultural attitudes and expectations.