Standardization of Peabody Developmental Motor Scales in Children Aged 60-71 Months in Shiraz

*Derakhshan Rad S.A. (M.Sc.)¹, Sazmand A.H. (Ph.D.)²

Abstract

Objective: The evaluation of the quality of motor abilities by the means of a standard instrument is important diagnostic parameter which leads to discovery of probable disabilities and developmental delay in childhood. Hence, to achieve a standard complete tool for measuring of indigenous children motor abilities regarding standardization of Peabody Developmental Motor Scales (PDMS) was the aim of this study.

Materials & Methods: In this descriptive study 150 normal children aged 60-71 months with identical gender distribution were selected by multiple cluster sampling among kindergartens of 6 urban districts of Shiraz and their gross and fine motor abilities were evaluated by Peabody developmental motor scales. Reliability and validity of Peabody developmental motor scales were examined initially. Afterwards, in order to standard the scale according to study population motor abilities, the raw scores which resulted of motor performance evaluation were analyzed and transformed to standard scores by determination of Pearson correlation and Intraclass correlation coefficient (ICC) calculation.

Results: High correlation coefficients proved that Peabody developmental motor scales were reliable and valid. With reference to the reliability, as a case in point, Intraclass correlation coefficient repeated test by the same therapist was 0.987 for gross motor scale and 0.971 for fine motor scale. Compiling the standardized tables by transforming raw scores to standard scores are the other significant findings of the study.

Conclusion: The Peabody developmental motor scales could be efficiently used in assessing 60-71 months old children and through comparing the measured scores to the obtained standard scores, proper diagnosis can be made.

Keywords: Peabody scales/ Gross motor abilities/ Fine motor abilities/ Test standardization

Receive date: 25/1/2009 Accept date: 8/6/2010

1- M.Sc. of Occupational Therapy, Academic Member of Rehabilitation Faculty of Medical Science University, Shiraz, Iran

2- Ph.D. of Psychology, Academic Member of University of Social Welfare & Rehabilitation Sciences, Tehran, Iran

*Correspondent Author Address:

Occupational Therapy Department, Rehabilitation Faculty of Shiraz University of Medical Sciences, First Abiverdi St., Shahid Chamran Blv., Shiraz, Iran.

***Tel:** +98 711 6271551

*E-mail: derakhshan@sums.ac.ir