## The Effectiveness of Family-Based Functional Educational Program on Calculation Skill of Slow Paced Students with Down Syndromes

Poorhanifeh H<sup>1</sup>,. Afrooz Gh.A\*. <sup>2</sup>, Arjomandnia A<sup>3</sup>

Original article

## **Abstract**

**Introduction**: Due to the fact that mathematics for slow-moving students should be in line with the realities of society, applied computing skills can include concepts that the student deals with objectively and directly in society and his needs as a citizen considers. The aim of the present study was to evaluate the effectiveness of a family-centered application curriculum on the computational skills of children with Down syndrome.

**Methods**: The present study was quasi-experimental (pre-test-post-test with control group). Thirty slow-moving elementary school students with Down syndrome studying in exceptional schools in Tehran were selected by convenience sampling method and randomly divided into experimental and control groups. The experimental group participated in 11 sessions of 45 minutes of Mohaghegh family-based application training package (1396) to improve computational skills. Both groups were evaluated in the pre-test-post-test stages using the Ki-Matt (1976) computational scale. Univariate analysis of covariance was used to analyze the data. **Results**: The results show that the family-centered application curriculum has led to an increase in the mean scores of computational skills of the participants in the experimental group compared to the control group (P < 0.001).

**Conclusion**: The results of the present study showed that the family-centered applied curriculum is an effective way to improve the computational skills of slow-moving students with Down syndrome.

**Keywords**: Applied Curriculum" Computational Skills" Down Syndrome" Family Based

**Citation:** H, Poorhanifeh, Gh.A. Afrooz, Arjomandnia A.. The Effectiveness of Family-Based Functional Educational Program on Calculate Skill of Slow Paced Students with Down Syndromes, Family and Health, 2021; 10(3): 41-54

©2020 The Author(s). This work is published by family and health as an open access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by-nc/4.0/). Non-commercial uses of the work are permitted, provided the original work is properly cited.

<sup>&</sup>lt;sup>1</sup>- Ph.D. Student of Psychology and Exceptional Children Education, Science and Research Unit of Tehran, Islamic Azad University, Tehran, Iran, Mail:houripori@yahoo.com ,ORCID:0000-0002-3259-163X

<sup>&</sup>lt;sup>2</sup>-(Corresponding Author), Professor, Department of Psychology, University of Tehran, Tehran, Iran, Mail: afrooz@ut.ac.ir, 0RCID: 0000-0001-8118-9332

<sup>&</sup>lt;sup>3</sup> -Associate Professor, Department of Educational Psychology & Counseling, University of Tehran, Tehran. Iran, Mail: arjmandnia@ut.ac.ir ORCID:0000-0001-8030-8416