EFFECTIVENESS OF AN AT-HOME BASED PHYSICAL ACTIVITY INTERVENTIONS FOR FAMILIES WHO HAVE CHILDREN WITH INTELLECTUAL DISABILITIES

Alyssa Gutierrez\(^1\) and (Kathleen A. Stanton-Nichols). School of Physical Education and Tourism Management, Indiana University Purdue University Indianapolis

This study was conducted to determine whether an at-home based activity intervention for families who have a child with an intellectual disability was an effective mean to increase motor skill ability and activity adherence.

**Purpose:** Specifically, investigators were interested in 1) determining whether weekly home-based visits improves motor skills (intervention group) more than those whose families received only weekly phone calls (attention group) and 2) determining factors that affected a family’s adherence to the program. Physical activity literature involving children with intellectual disabilities suggests that behavior management, directed activity programming, and family intervention enhance adherence as well as sustainability of a new program. The authors anticipated that the intervention group would have greater adherence to an exercise program and exhibit improved scores on the gross motor quotient (GMQ), which is a numeric representation of the participant’s overall score on the assessment.

**Methods:** The study was conducted with 16 families, eight in the intervention group and eight in attention group. Measures of efficacy include activity adherence (self-report) and pre/post motor skill performance on an assessment examining motor skills. **Results:** An independent t-test was conducted comparing scores from the pre- to the post- assessments between the attention and intervention groups. There were no significant differences between the scores for the attention group (\(M=11.25, SD=9.177\)) and the intervention group \(M=20.25, SD=21.737; t(14)=-1.079, p=.3\) (two-tailed). However, the magnitude of the differences in the means (mean difference=-9.0, 95% CI: 26.892 to 8.892) showed that there was a moderate effect. **Conclusion:** The results of this study showed that there were no statistical significances between the improvements in the scores between both groups. However, although not statistically significant the intervention did have a moderate effect on the groups. The investigators were encouraged by the moderate effect of the intervention.

1. This project was funded by Louis Stokes Alliance for Minority Participation, Diversity Scholar Research Program.
*Equipment for this project was purchased with a grant from the Undergraduate Research Opportunities Program.