



## ABSTRACT

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### **DIFFERENCE BACKWARD WALKING EXERCISE AND CORE STABILITY EXERCISE IN IMPROVING POSTURAL STABILITY IN CHILDREN WITH DOWN SYNDROME.**

Consisting of VI Chapter, 63 Pages, 8 Tables, 8 Figures, 4 Schemes, Attachment

**Objective:** to determine differences in backward walking exercise and core stability exercise against improving postural stability of children with Down syndrome. **Method:** this research is quasi experimental with pre-experimental group post-test, where an increase in postural stability was measured using Time Up and Go Test (TUGT). The sample consisted of 12 people at the Tri Asih Foundation grouped into 2 groups. Group I consisted of 6 people with backward walking exercise intervention and group II consisted of 6 samples with core stability exercise intervention. **Results:** normality test with Shapiro Wilk test obtained data with normal distribution while the homogeneity test with Levene's test obtained data has a homogeneous variant. Hypothesis test results in treatment group I with paired sample t-test, obtained the value of TUGT  $p=0.025$  which means that walking exercise backward intervention can improve postural stability of children with Down syndrome. In treatment group II with paired sample t-test, the value of TUGT was  $p=0.006$  which means that core stability exercise intervention can improve postural stability of children with Down syndrome. The results of the independent t-test showed  $p=0.038$  in TUGT, which means that there is a difference between backward walking exercise and core stability exercise to improve postural stability of children with Down syndrome. **Conclusion:** There is a significant difference between intervention of backward walking exercise and core stability exercise on improving postural stability of children with Down syndrome.

**Keywords:** Backward Walking Exercise, Core Stability Exercise, Postural Stability, Down Syndrome.