# Physical Activity Influence on Adults with Intellectual and Developmental Disabilities

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### ABSTRACT

Less than a one-third of adults with Intellectual and Developmental Disabilities (IDD) are meeting national physical activity guidelines (WHO, 2020). Adults with IDD are at risk for developing chronic health related diseases, such as cardiovascular disease, type-2 diabetes, and hypertension earlier in adulthood and typically progress faster than adults without IDD. Physical activity combats these chronic diseases and needs to be introduced to this population in an accessible way. PURPOSE: To determine the influence of physical activity training sessions on balance, flexibility, range of motion, cardiorespiratory fitness, muscular endurance, muscular strength and self-efficacy in a group of individuals with IDD. **METHODS:** Participants completed two (30-min) physical activity sessions every week over 6 weeks. Seven measurements were assessed pre and post. Self-efficacy was measured at the end of sessions every two weeks. Observational data in relation to level of engagement from each session was recorded. **RESULTS:** There were no statistically significant results between pre and post measurements. There were large and meaningful effects sizes for Sit to Stand (Cohen's d = 2.182), Timed Up-and-Go (Cohen's d = 2.182) 2.116) and Right Shoulder Extension (Cohen's d = 1.309). All other assessment measurements were maintained pre and post. A clear increase in motivation and willingness to engage for longer durations during the sessions was observed by the researchers. Self-efficacy and level of confidence increased, as well as trust with trainers and comfortability in the gym. **CONCLUSION:** The hope of this study was to contribute to the supporting literature for the need and successes of physical activity programming for individuals with IDD. It is important to increase the accessibility of these individualized programs to enhance motivation for the engagement in healthy active lifestyle behaviors, as they are capable and eager to participate.

