THE USE OF THE NINTENDO WII FOR BALANCE AND COGNITION AS A TREATMENT MODALITY IN OCCUPATIONAL THERAPY IN PERSONS WITH MULTIPLE SCLEROSIS FOR INCREASED INDEPENDENCE IN ACTIVITIES OF DAILY LIVING

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Objective: Examine the effectiveness of the Nintendo Wii on balance and cognition deficits to increase independence in activities of daily living for an individual with MS.

Design: ABA single subject experimental design

Participants: n=1; 37 year old female with diagnosis of multiple sclerosis. Inclusion/exclusion criteria met by participant: the participant must be ambulatory in the home, have functional vision, medically stable, and have adequate hand and wrist function; they cannot be receiving other therapy during the intervention. The Mini Mental State Exam was used to screen for cognitive deficits.

Protocol: Pre- and post- testing within one week prior to and following intervention, respectively. Intervention included one hour a day 5 days a week for 4 weeks playing various Nintendo Wii games; twice a week for one hour with therapist supervision while playing Wii Fit and 3 sessions using the game "Brain Challenge" in the home without supervision while sitting.

Outcome Measures: Canadian Occupational Performance Measure (COPM), measures importance and satisfaction with daily activities, Berg Balance Scale (BBS), Timed Instrumental Activities of Daily Living (TIADL).

Data Analysis: SPSS

Results: The participant exhibited the following improvements from pre to post-testing: an increase in balance scores on the BBS, a decrease in processing time on the TIADL, and a significant change in outcomes on goals the client identified as most important using the COPM. Descriptive statistics will be used to compare improvement in assessments from pre to post-testing, game progress, and how the participant felt the intervention benefited her life via survey.