

**THE EFFECTIVENESS OF BILATERAL VERSUS UNILATERAL  
TASK RETRAINING USING THE SAEBOFLEX ORTHOSIS IN  
INDIVIDUALS WITH SUBACUTE AND CHRONIC STROKE**

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The purpose of this study is to examine the effectiveness of the SaeboFlex orthosis, comparing unilateral versus bilateral task training with the device in patients with subacute and chronic stroke. This study addresses the question as to whether unilateral or bilateral task training is more beneficial for upper extremity motor and functional recovery after stroke while using the SaeboFlex, a relatively low-cost, client-driven orthotic device. The sample population consists of individuals who are greater than 6 months post-stroke and meet the specific qualifications for use of the device. Each participant is randomly assigned to the unilateral task training group (3-6 participants) or bilateral task training group (3-6 participants). The protocol for our study consists of six assessments for pre- and post-testing along with a five-day training session in the use of the device, if needed. This is followed by a four-week home program and outpatient training, where the program is completed six days a week, twice a day for 60 minutes and is upgraded as appropriate. We hypothesize that the bilateral task training group will result in a greater increase in motor function, performance satisfaction, and quality of movement as compared to the unilateral task training group, based on pre-test and post-test data. The study is currently in progress; thus far there are some promising observable and measurable results including decreased muscle tone, increased range of motion, and increased quality of movement in both the unilateral and bilateral task training groups. The majority of data collection and analysis will be completed by the beginning of November.