

### Research Article

Published Date:-2017-06-23 00:00:00

#### [Reliability and validity of the Sit-To-Stand Test to assess Global Foot Mobility](#)

The Sit-to-Stand test (STST) involves comparing the change in a person's non-weight-bearing and weight-bearing foot posture to quickly classify a person's overall foot mobility. Despite the simplicity of the test, its reliability and validity has not been established. The purpose of this study is to determine the intra-rater and inter-rater reliability of the STST as well as its validity. Ninety-seven subjects with a mean age of 25 years ( $\pm 3.7$ ) participated in the study. Each subject's foot posture from non-weight-bearing to weight-bearing was evaluated by two different raters. Each rater classified each subject's change in foot posture as "Hypomobile", "Normal" or "Hypermobile". This same procedure was repeated approximately one week later without the raters being able to review what their original classification for that subject had been. The subjects also had their foot mobility quantified by measuring the height and width of their dorsal arch in both non-weight-bearing and weight-bearing. These quantitative measures of foot mobility were then classified as "Hypomobile", "Normal", or "Hypermobile" using quartiles. A series of Cohen's Kappa coefficients were used to assess the amount of agreement between the visual classifications by each rater as well as the classification between the observational and objective classifications. The between-day Kappa coefficients ranged from 0.613 to 0.719 and the inter-rater Kappa coefficients ranged from 0.473 to 0.531. The Kappa coefficients between the visual and quantitative classifications ranged from 0.281 to 0.436. The STST should therefore be used with caution because of its moderate between-rater reliability and validity.

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### Research Article

Published Date:-2017-05-31 00:00:00

#### [Use of Hand Rehabilitation Board \(Dominic's Board\) in Post Traumatic/Stroke Rehabilitation of the Upper Limbs](#)

In recent years, the increasing number of patients with upper limb musculoskeletal disorders seeking timely, intensive, prolonged and task oriented hospital- and home- based physical rehabilitation, and the decreasing numbers of trained therapist to provide the needed care, have left a palpable gap. These have resulted in several preventable deformities with associated complications leading to social and economic burdens. Although the introduction of some robotic devices has addressed some of these concerns, the shortfalls from the use of these devices limit their effectiveness. The newly introduced hand rehabilitation board (Dominic's Board) was prospectively evaluated in 82 patients with ULMDs of different etiologies to assess its therapeutic efficacy in rehabilitation of ULMDs. Additive, but complementary effect was observed when used along with conventional hospital-based therapy and at home, suggesting the effectiveness of this device in preventing or ameliorating the complications associated with ULMDs.

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### Research Article

Published Date:-2017-05-02 00:00:00

#### [Effects of a short Cardiovascular Rehabilitation program in Hypertensive subjects: A Pilot Study](#)

Systemic arterial hypertension (SAH) is considered an important risk factor for the development of cardiovascular diseases. The aim of the present study was to verify the effects of a short cardiovascular rehabilitation program (CR) in hypertensive subjects. The clinical pilot study involved a sample composed of 11 hypertensive subjects. It was evaluated the weight, height, body mass index (BMI), waist and hip circumference, waist hip ratio, systolic blood pressure (SBP), diastolic blood pressure (DBP) and six-minute walk test (6-MWT) before and after CR. CR was performed twice a week for 60 minutes. The results shown that after CR occurred a reduction of waist circumference ( $99.86 \pm 8.7$  to  $95.2 \pm 8.6$  cm,  $p=0.0002$ ) and hip circumference ( $110.18 \pm 14.75$  to  $105.00 \pm 12.7$  cm  $p=0.01$ ) values. About the mean distance walked in the 6-MWT there was an increase after the CR program ( $335.9 \pm 123.5$  m to  $554.56 \pm 87.9$  m,  $p=0.000$ ). In conclusion, the results suggest that a short CR is an effective for the treatment of hypertensive subjects. After 16 CR sessions, functional and musculoskeletal capacity was improved, evaluated by 6-MWT. Furthermore, the short CR program decreased waist and hip circumferences, being an important option for these subjects. Although. There were no changes in baseline blood pressure levels.

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[Translating an Evidence-Based Physical Activity Service From Context To Context: A Single Organizational Case Study](#)

Background: SCI Action Canada partnered with researchers to adapt an evidence-based leisure-time physical activity (LPTA) counselling service (Get-in-Motion (GIM)). A satellite GIM service called Passez à l'action was established within a French-speaking context for persons with physical disabilities. An understanding of the determinants that influenced the implementation and functioning of the GIM service within the Adaptavie context are required to maximize the potential of other community-based LTPA services being successfully introduced in similar organizations.

Purpose: The case study objectives are to: 1) describe the characteristics and implementation contexts of two leisure-time physical activity counselling services for Canadians with a physical disability and the adoption process that took place when the protocol was translated to a new context, and 2) elucidate, from the point of view of the service providers, the organizational determinants that could have facilitated and/or hindered the implementation and functioning of these services.

Methods: Guided by the Consolidated Framework for Implementation Research, focus groups were held with the directors and staff of each service. Mixed-content and thematic analyses were then used to determine overarching themes.

Results: Findings suggest that the presence of service innovators fosters ownership of the service and facilitates ongoing staff training and support. A thoughtful implementation plan should be included as a component of translation between contexts.

Conclusions: Lessons learned and recommendations for future translation of similar evidence-based services to additional contexts are discussed.

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