

Side Step Study
 Conducted by SciFit Corporation
 Recumbent Lateral Trainer
 March - April 2015

Introduction:

A Side Step Test (SST) is a simple fitness measuring agility in test subjects, conducted over one minute. In this test, 18 male and female test subjects performed side step tests to get a baseline of their performance. They then conducted workouts on a recumbent lateral trainer under the supervision of a physical therapist.

Three weeks later, 15 of the original test subjects re-took the side step study to measure their progress.

The subjects:

The subjects were male and female and ranged in age from 72 years old to 95 years old. Some were experiencing age related decline, and some had notable health issue impacting balance and strength such as history of stroke, nerve damage or Parkinson's Disease.

Subject Gender and #	Notable Medical issues	Date of Birth	Power Factor Before	Power Factor After	Improvement
Female 1		6/27/26	129.25	148.5	14.90%
Male 2		9/24/21	138.125*	161.25	16.70%
Female 3		9/20/30	310.5	434.625	40.00%
Male 4		10/18/20	107.5*	163.625	52.20%
Female 5		1/6/39	140	316	125.70%
Female 6		10/30/39	117.5	236.25	101.00%
Female 7		10/31/36	187.5	204.75	9.20%
Female 8	Nerve damage	8/27/32	134.75	144	6.9%
Female 9		7/24/40	226.875	315	38.80%
Female 10	Stroke	6/27/41	187.25	388.5	107.50%
Male 11		3/18/40	176.75	298.375	68.8%
Male 12		8/27/26	133.875*	221.875	66%
Female 13			153.75	-	-
Male 14	Parkinson's & Stroke	9/4/35	106.25	114.75	8%
Male 15			126.5	-	-
Female 16		11/18/31	142.5	264	85.26%
Female 17		1/28/43	157.5	383.375	144%
Female 18			151.25	-	-

*Denotes balance problems at baseline test; resolved with second test.

Table 1: Power Factor Results

Results:

Every single subject who completed the study had improved power factor results ranging from a low of 6.9% from a test subject with nerve damage in both legs, to a high of 144% in a 72 year old female. The average improvement was 59%.

Three of the test subjects who had experience loss of balance in the first test were able to perform the second test without balance issues.

Conclusion:

Recumbent lateral trainers can improve strength and stability resulting in improved balance and performance.