

SilverFit: keeping the silver generation fit!

SILVERFIT

Hong Kong, 22 november 2018



SilverFit:

Founded 2008 in The Netherlands

Employees: 43

Products developed: 9

Locations using our systems: 3000+

Countries present: 22

Innovation awards won: 6

Our starting point...



Suppose there would be a medicine that...

- Helps prevent heart disease, Diabetes Mellitus II, Obesitas, Osteoporosis, Stroke, Depression, Colon cancer and Breast cancer
- Improves, among other things, your blood pressure, sleep rhythm, psychosocial wellbeing, coordination, reaction speed...
- Helps to keep you independent and active for longer
- Is cheap and does not have too many side-effects

Would you take this medicine?

Of course, we are talking about exercise!



We use games and media experiences to make exercise fun!



The exercises have been created based on scientific insights to enable activities of daily life

Example: improving mobility after stroke

Domain	Paragraph	Intervention/ measure/ determinant	Weight of evidence			Treatment Guidelines	References
			1	2	3		
MOBILIZATION PHASE							
Walking ability and gait-related abilities	E.1.4	Prognosis for walking ability			+	19 There are indications that the prognosis for walking ability is largely determined in the first 2 weeks after the onset of a CVA. Synergy formation and age are the most important clinical determinants predicting the recovery of walking ability, as measured with the Functional Ambulation Categories, 6 months after the onset of stroke. The most important determinants of recovery of walking ability appear to be a stage 3 or higher motor recovery according to Brunstrom (synergy formation) and age younger than 70 years. Compared to the predictors of walking ability, those of comfortable walking speed are less accurate. The most important predictive factors for walking speed after 6 months seem to be muscle strength of the paretic leg, sitting balance and social support (informal care).	5 scrs(1,2),20(10)
	E.2.4	Sitting balance			+	20 It has been demonstrated that reaching exercises with the non-paretic arm during sitting, in which patients learn to reach beyond the base of support (i.e., beyond arm's length) and are aware of their own body posture, have a positive effect on sitting balance. It is unclear whether improved sitting balance also results in improvements in standing, standing up, sitting down and walking.	4 scrs(1),10(2),20(2)
	E.3.4	Asymmetrically driving a manually propelled wheelchair Using the paretic arm			-	21 It is possible that manually propelling a wheelchair asymmetrically with the non-paretic hand and foot in patients with stroke with an unstable paretic arm in the sub-acute phase does not lead to increased specificity of the paretic side. 22 There are indications that involving the stable paretic arm in riding a wheelchair leads to fewer steering errors.	1 scrs(1),1(1),2(1)
	E.4.3	Symmetry while standing up and sitting down			+	23 It has been demonstrated that exercising symmetric standing up and sitting down has a positive effect on an even left-right distribution of body weight during these position changes and on the speed of performance of these activities. This effect has been demonstrated in patients in the sub-acute and	5 scrs(1),10(3),20(3)

“It has been demonstrated that exercising **symmetric standing up and sitting down** has a positive effect on an even left-right distribution of body weight during these position changes and on the speed of performance of these activities. This effect has been demonstrated in patients in the post-acute and chronic phases.

It is unclear if these effects on speed of standing up and sitting down persists after the end of the intervention.”

Evidence: level 1; 5 RCTs

Source: Guidelines Royal Dutch Society for Physiotherapy, see <https://www.kngfrichtlijnen.nl/654/KNGF-Guidelines-in-English.htm>

This way people love to join an exercise group



We can provide useful exercises for people with a large range of physical and cognitive abilities



Specific exercises for people with dementia



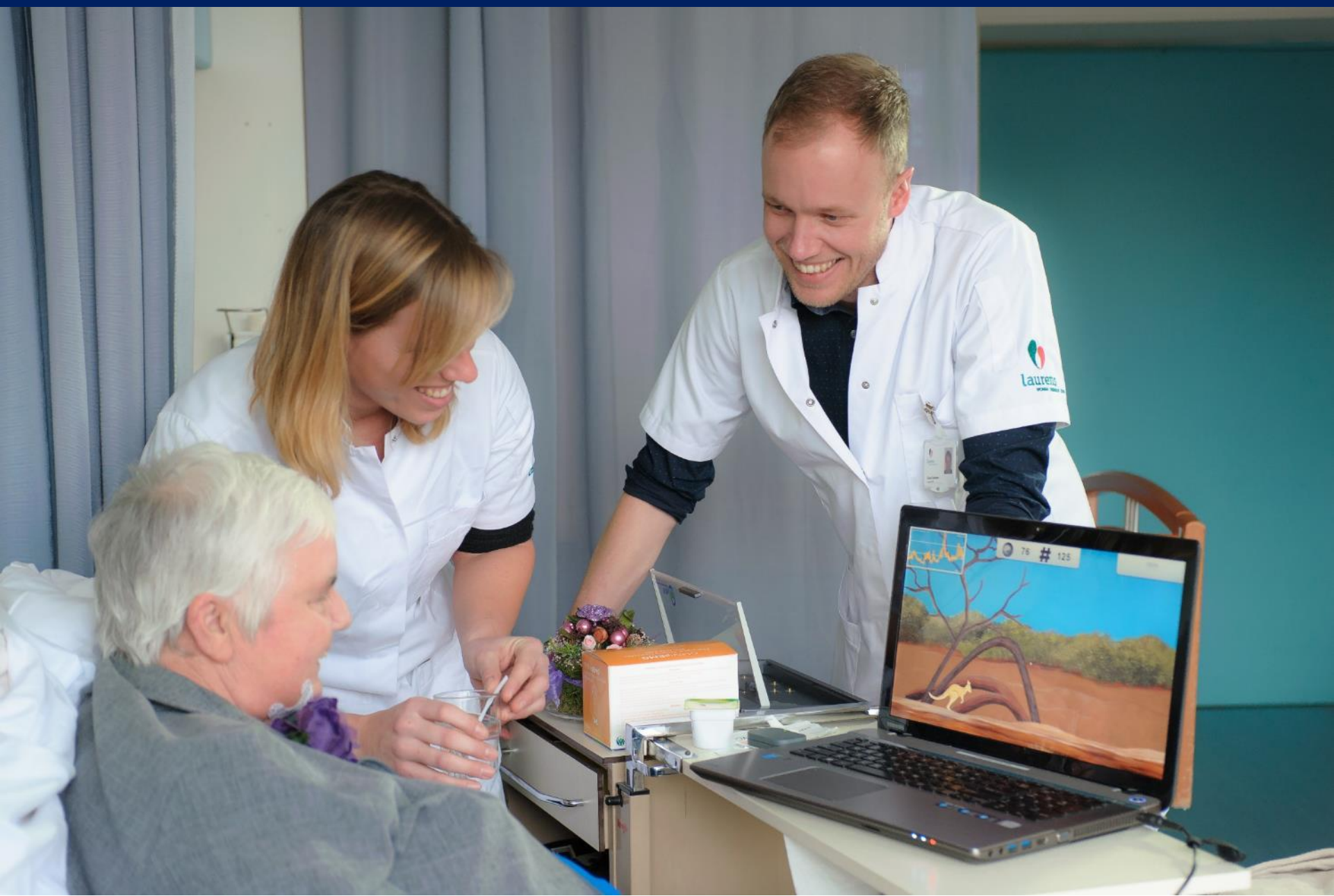
SilverFit Newton: strength training



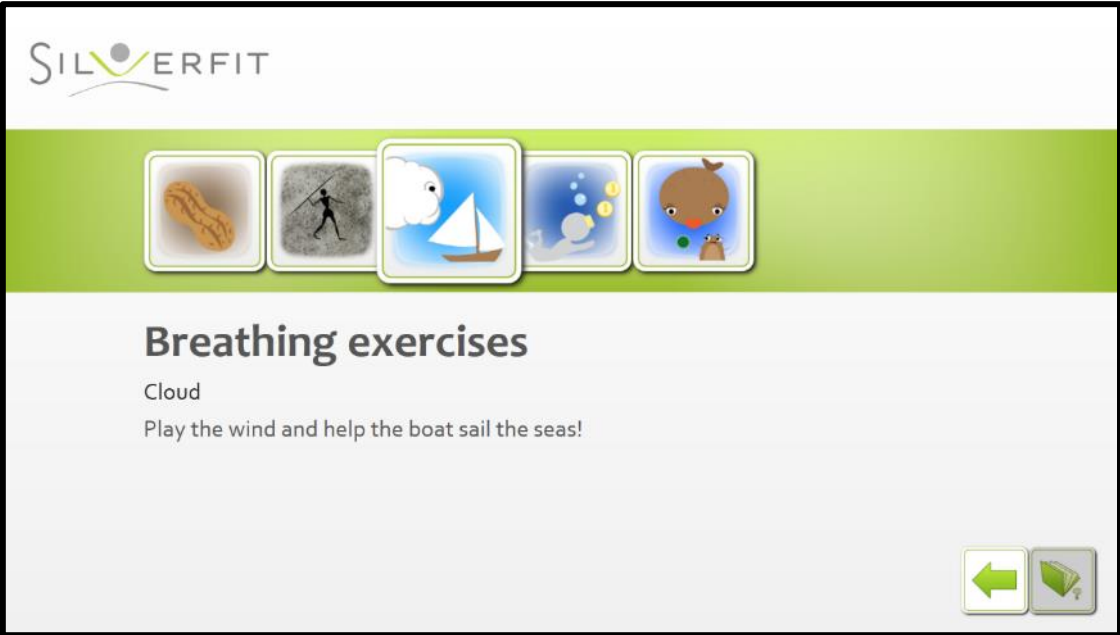
Cardio training: a bike or active-passive trainer with video. You can take a trip anywhere in the world!



Rephagia: training for people with swallowing problems



SilverFit Flow: breathing exercises



Launch in 2019



How to reach people living at home: multifunctional SilverFitness training rooms



How to reach people living at home: multifunctional SilverFitness training rooms



Silverfitness brings people together.



A compact version of the SilverFit makes it possible to train at home



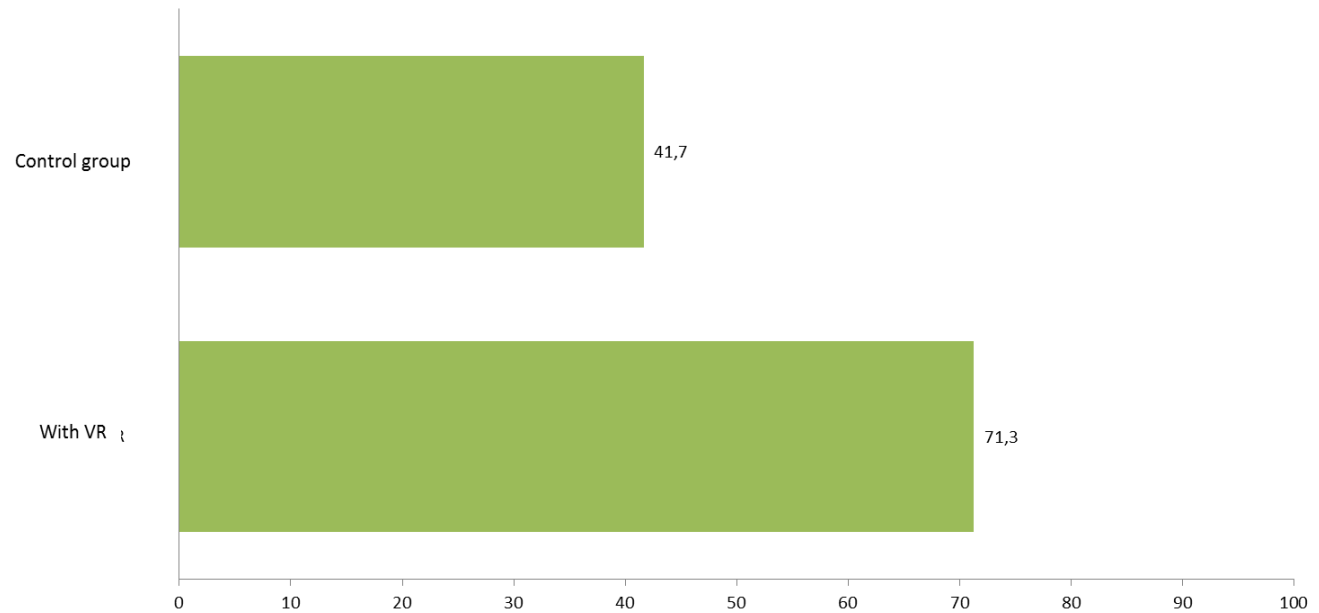
Use cases:

- Get fit before or after surgery
- Training for people with chronic diseases (heart failure or COPD)
- Provide physiotherapy exercises at home, with daily exercises

This leads to more people showing up and doing the exercises!

Cycling with videogames improves exercise adherence

Exercise adherence
% present at training

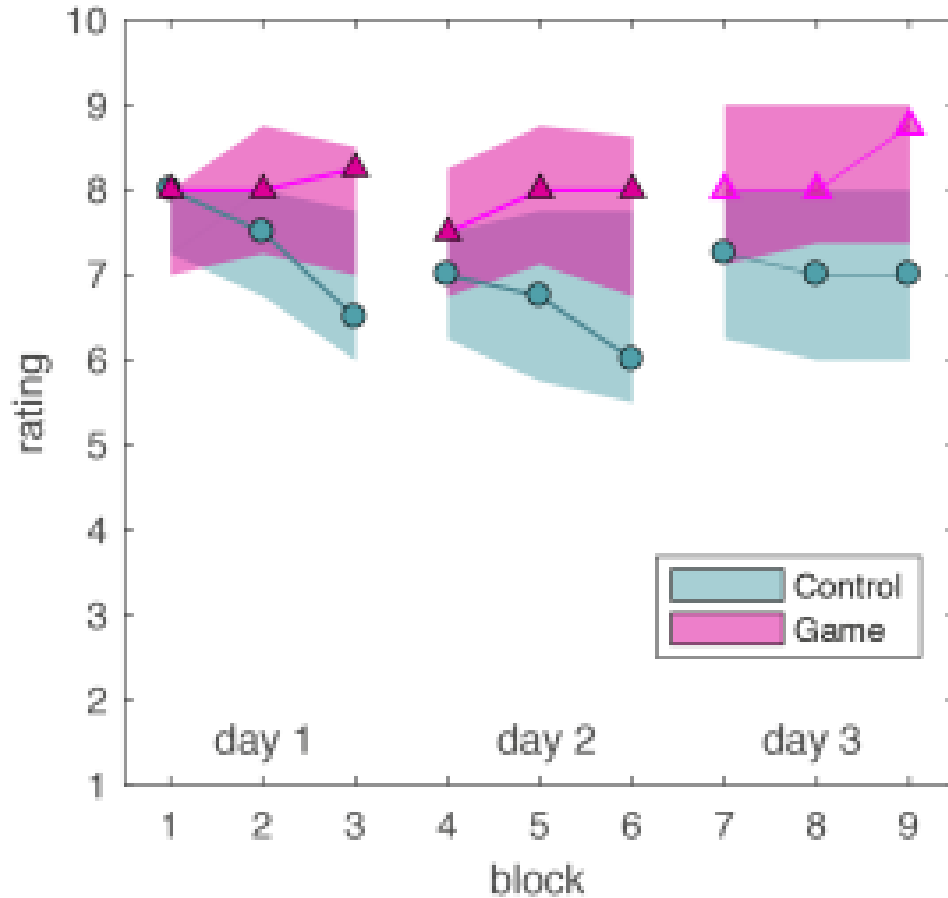


29 inactive young males (16 with VR, 13 without VR), 3 days per week, 30 minutes with average intensity (60-70% heart rate reserve) for 6 weeks.

Source: Rhodes et al. (2009)

The games ensure motivation stays high...

Median Quick Motivation Index



SilverFit-groep: 12 participants, control: 12 participants (conventional training). Quick Motivation Index uses a 1-10 scale

Bron: van der Kooij et al. (2018). Influences of Gamification on the Level and Durability of Intrinsic Motivation. *Not yet published.*

"I really like it. This is something special for everybody"

Mrs. Irène S., SilverFit user



More information?

**Lots of information and movies on:
www.silverfit.com**

**Contact me directly:
Joris Wiersinga
Joris@silverfit.nl**

Follow us on LinkedIn or Facebook!

**Representative in Hong Kong: Health Link
Booth 1-A06 / Interactive zone
www.healthlinkholdings.com**

Seated exercises, Bingo: detailed settings

Detail menu

Number of players



Two player game

Select the number of participants; the orange section below will appear only with two participants

Movement

Left player



Stand up

Right player

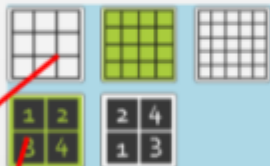


Stand up

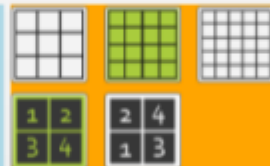
Set the required movement for the leftmost participant

Separately set the movement and difficulty level for the second participant in the orange fields. These only appear in 2-player mode

Game difficulty



Bingo card size is 4x4 (moderate)



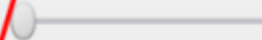
Bingo card size is 4x4 (moderate)

Set the size of the bingo card

Numbers are ordered

Numbers are ordered

Choose whether numbers should be ordered or placed randomly. Random numbers are more difficult from a cognitive point of view



Reaction time: 00:30

Maximum time a ball will stay if patient does not react



Time to rest between balls: 00:03

Resting time: duration of pause before next ball is drawn

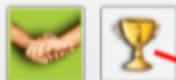
Graphics



Full graphics

Choose full graphics or simplified graphics

Dynamic



Both players can score, there is no competition

Set to cooperate (both players can score each time) or compete (only first player to react scores)