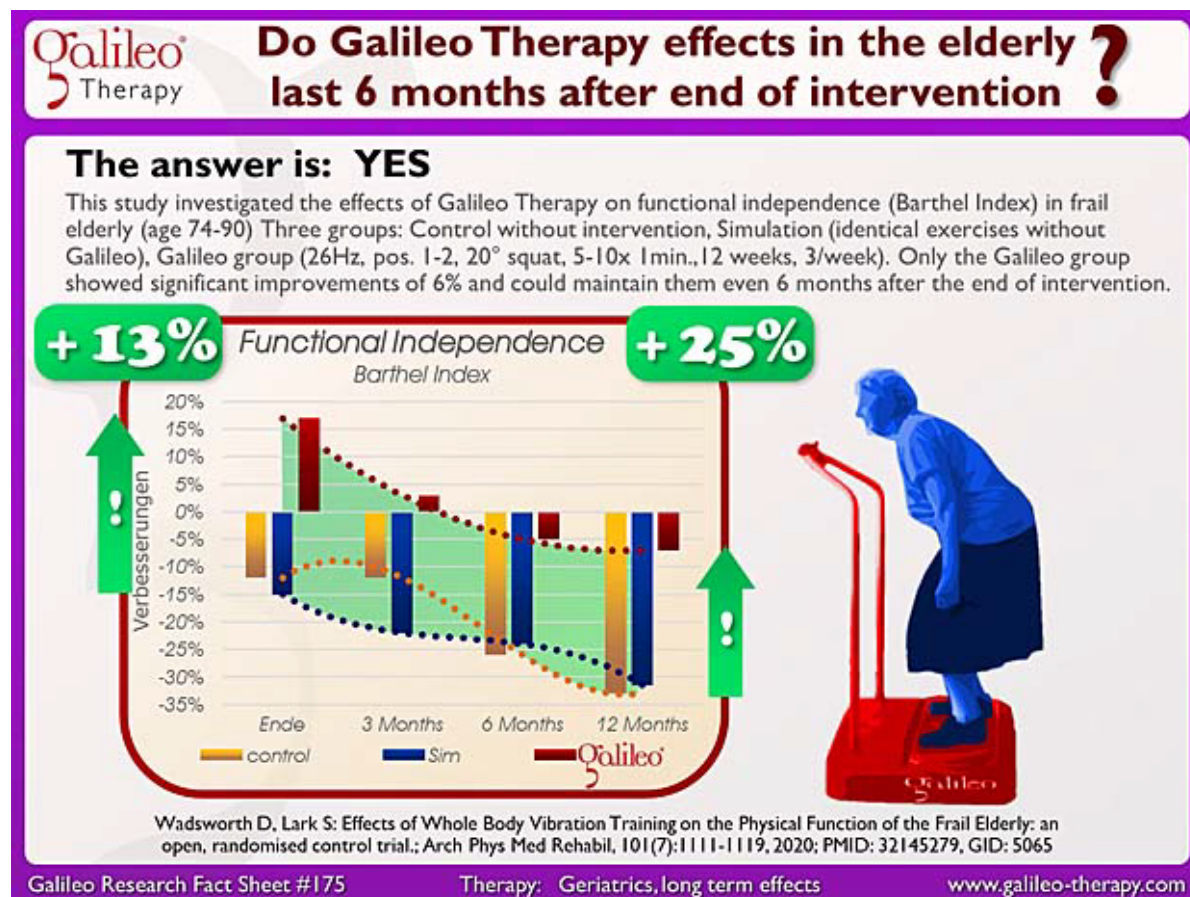


## Galileo Research Fact Sheet #175: Do Galileo Therapy effects in the elderly last 6 months after end of intervention?



This study investigated the effects of Galileo Therapy on muscle function and balance in frail elderly (age: 74-90). Three different groups were compared: a control group without any intervention, the Galileo group and a simulation group receiving identical exercises as the Galileo group but without vibration. The Galileo group received over a period of 16 weeks, 3 times per week, 5 to 10 times 1 minute Galileo Therapy with 1 minute breaks (20° slight squat, position 1-2, 26Hz).

The results showed only for the Galileo Group a significant increase in the tested muscle function parameters like +6% walking distance (10 minutes walking test, 10mWT), +7% performance in the timed up and go test (TUG) and +14% in tandem walk test (dynamic balance) (#GRFS170). The combination of these effects is characterized by the functional independence or Barthel Index. Its development over time after end of intervention indicates the sustainability of effects or the long-term effect.

The Barthel Index shows a significant decrease in both control groups over a period of 12 months after end of intervention. Only the Galileo group shows a significant increase due to therapy. While this effect is largest directly after the end of therapy 70% of it are still observed up to 6 months after the therapy. After 12 months the effects are back to baseline in the Galileo group, but both control groups significantly decreased functional independence in the same period of time. In summary Galileo Therapy shows double the effect of traditional exercises (sim) and a trend toward increasing difference (from 13 to 15% points) over time compared to control without intervention (control).

Consequently, using Galileo Therapy in intervals is a very efficient option: An intensive therapy phase of 4 to 12 weeks, repeated every 6 to 12 months can compensate the expected functional decrease with aging – another reason why Galileo Therapy is so effective even in old age.

Therapy - Geriatrics, long term effects  
#GRFS175 #GRFS