

Does the use of Pixformance with the recommended homework program have a positive effect on the walking ability of a MS patient?

Bachelor Thesis Maya Gudrun Zientz

Fresenius University of Applied Sciences, Marienburgstr. 6, D-60528 Frankfurt (Germany)

1. Supervisor: Prof. Dr. Michael Jung; 2. Supervisor: Constanze Santarossa

Abstract

For this Bachelor thesis, a single case study with the primary question „Does the application of Pixformance and the corresponding homework program have a positive effect on the walking ability of a MS patient?“ was performed. Additionally, the secondary question „Does the application of Pixformance and the corresponding homework program have a further positive effect on the balance ability and the quality of life of a MS patient?“ was examined.

The individual case study was conducted over a period of 16 weeks with each two alternating four-week training phases and four-weeks training breaks. In the two four-week training phases, the study participant conducted a training with Pixformance and the corresponding homework program. In the two four-week training breaks the study participant took a training break, this served as control phases. Five test methods were used before and after the respective training phases and training breaks, which measured the ability to walk, the balance ability and the quality of life of the study participant.

Through the entire study period, an improvement of the walking ability could be observed during the two assessments, the Timed Up and Go Test and the 10 Meter Walk Test. However, these two tests did not show any correlation between the performance of the study participant, training phases and training breaks. The study participant achieved an increase in his balance ability after the two training phases in the Berg Balance Scale and in the Functional Reach Test. Even after the two four-week training pauses, the positive effect of the training on the balance ability was still obvious. The measuring of the quality of life showed similar results: The evaluation of the MSQOL-54 questionnaire showed that mental and physical health increased after the two training phases, and a slightly lower positive effect also can be observed after the two four-week training breaks.

Would you like to read the entire study?

Please contact Mr. Tobias Baader:

E: tbaader@pixformance.com

T: +49 (0)30 39 80 56 10