

# SilverFit –Literature and Research Review

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This document consists of two parts. The first part provides a scientific literature review of research related to the usage of the SilverFit. The second part is an overview of research in the usage of virtual therapy, mostly in geriatric care.

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## 1. SilverFit Literature

### SilverFit & General health

1. Belong Macclesfield (2017). **Impact of SilverFit 3D and Mile on health parameters of care center residents** (Unpublished).

### SilverFit & Rehabilitation

1. Attema, K.J. (2018). **Design of a long-range, cost-effective serious gaming system for reliable gait measurement of the elderly to support their physical activity** (Unpublished Master's thesis). University of Twente.
2. Rademaker, A., Van der Linden, S., & Wiersinga, J. (2009). **SilverFit, a virtual rehabilitation system**. *Gerontechnology*, 8(2), 119.
3. Van der Burgt, R., & Wiersinga, J. (2009). **Moderne ouderenzorg: revalidatie met behulp van computerspellen** [Modern geriatric care: rehabilitation using computer games]. *Fysiotherapie & Ouderenzorg*, 23(3), 43-50.
4. Hendriks, C., & Boverhof, M. (2020). **Serious gaming met de SilverFit beweegsystemen** [Serious gaming with the SilverFit exercise systems]. *Nederlands Tijdschrift voor Geriatriefysiotherapie*, 34(3), 14-20.

### SilverFit & Stroke

1. Veringa, M. (2018). **Het effect van exergame therapie op de loopvaardigheid van chronische CVA-patiënten in vergelijking met conventionele fysiotherapie. Een literatuuronderzoek** [The effect of exergame therapy on the walking ability of chronic CVA patients compared to conventional physiotherapy. A literature study] (Unpublished Bachelor's thesis). Utrecht University of Applied Sciences.
2. Kivihalme, K. (2016). **User centered research for fine motor control rehabilitation after stroke in The Netherlands** (Unpublished Bachelor's thesis). JAMK University of Applied Sciences.
3. Le, J. (2015). **Literature review of evidence for best evidence based exercises and state of the art of virtual reality rehabilitation for the upper extremity post stroke** (Unpublished Bachelor's thesis). Fontys University of Applied Sciences.
4. Altink, T., Kloosterman, P., & Van der Knaap, S. (2015). **Balansprotocol voor CVA patiënten** (Unpublished Bachelor's thesis). Leiden University of Applied Sciences.
5. Schot, J.J., & Van der Meer, L.S. (2015). **Virtuele therapie na een CVA. Wat kan er toegevoegd worden aan de spellen van de SilverFit die SilverFit heeft ontwikkeld voor de revalidatie na een beroerte voor de arm/hand functie?** [Virtual Therapy after stroke. What can be added to the games SilverFit has developed for post-stroke rehabilitation of the arm-hand function?] (Unpublished Bachelor's thesis). Thim van der Laan University of Applied Sciences.
6. Jonker, S. (2013). **Virtual reality bij revalidatie na een beroerte** [Virtual reality used for post-stroke rehabilitation] (Unpublished Master's thesis). Avans Plus University of Applied Sciences.
7. Van de Bunt-Welling, M. (2021). **Samen op weg naar zelfredzaamheid met meer beweging** [Working together to build self-sufficiency, by offering exercise more often] (Unpublished Master's thesis). HAN University of Applied Sciences.

## SilverFit & Orthopedic Rehabilitation

1. Kenson, W., Van Donge, G., De Kaper, A., & Blom, S. (2015). **Een protocol met gebruik van virtuele therapie bij revaliderende ouderen na een beenamputatie – triangulatie onderzoek** [A rehabilitation protocol using virtual therapy for elderly people with a leg amputation - triangulation] (Unpublished Bachelor's thesis). Leiden University of Applied Sciences.
2. Van Wijngaarden, J. (2013). **Kan therapeutisch gamen gebruikt worden als extra trainingsmoment bij de geriatrische orthopedische revalidant?** [Can therapeutic games be used to create more training moments for the geriatric orthopaedic rehabilitant?] (Unpublished Master's thesis). Avans Plus University of Applied Sciences.
3. Oude Aarninkhof, L., & Pinxteren, K. (2012). **Virtuele training voor ouderen – Handleiding heuprevalidatie SilverFit als ondersteuning voor reguliere oefentherapie** [Virtual training for elderly people – Manual Hip rehabilitation SilverFit used as part of regular therapy] (Unpublished Master's thesis). Avans Plus University of Applied Sciences.
4. Van der Linden, S. (2009). **Wat is de meerwaarde van de SilverFit en is het bruikbaar in de fysiotherapie bij mensen met een THP/TKP?** [What is the added value of the SilverFit and is it useful for physiotherapy for people with a THP/ TKP?] (Unpublished Bachelor's thesis). Avans University of Applied Sciences.
5. Wiersum, B. (2019). **Kwaliteitsonderzoek naar orthopedisch revaliderende ouderen met behulp van de SilverFit** [Qualitative research examining elderly who undergo orthopedic rehabilitation using the SilverFit] (Unpublished Bachelor's thesis). Thim van der Laan University of Applied Sciences.
6. Van Cruchten, A. (2019). **Een kwalitatief onderzoek naar de hanteerbaarheid en de ervaringen van het SilverFit amputatieprogramma binnen de Geriatrische Revalidatiezorg** [Qualitative research examining the manageability and experiences of the SilverFit amputation program within the geriatric rehabilitation care] (Unpublished Master's thesis). Avans Plus University of Applied Sciences.
7. Van de Ven, S., & Versteegen, C. (2020). **Trainen met de SilverFit Newton: is er een verschil in plezier en motivatie? Een mixed-methods onderzoek onder geriatrische orthopedische revalidanten** [Exercising with the SilverFit Newton: is there a difference in pleasure and motivation? A mixed-methods study on geriatric orthopedic rehabilitants] (Unpublished Bachelor's thesis). Avans University of Applied Sciences.

## SilverFit & Parkinson's Disease

1. Harteveld, N., Van der Ven, L., Vessies, K., & De Vries, E. (2016). **Wat zou virtuele therapie voor Parkinson patiënten kunnen betekenen?** [To what extent is virtual therapy useful for patients with Parkinson's Disease?] (Unpublished Bachelor's thesis). Leiden University of Applied Sciences.
2. Van Uden, S. (2019). **De ervaringen van parkinsonpatiënten met loopbandtraining door middel van de SilverFit Mile** [Experience of patients with Parkinson's Disease performing treadmill training using the SilverFit Mile] (Unpublished Bachelor's thesis). Avans Plus University of Applied Sciences.

## SilverFit & Oncology

1. Buningh-Quaedvlieg, F. (2018). **Het toepassen van een beweegprogramma op de SilverFit bij de geriatrische palliatieve oncologierevalidant met als doel het verbeteren van het fysiek functioneren en verminderen van de kwetsbaarheid. Een haalbaarheids-/pilotstudie** [The application of a SilverFit exercise program in the geriatric palliative oncologic rehabilitation to improve physical functioning and to reduce frailty. A feasibility/ pilot study] (Unpublished Master's thesis). Avans Plus University of Applied Sciences.

## SilverFit & Clinical Tests and Parameters

1. Griswold, D., Rockwell, K., Killa, C., Maurer, M., Landgraff, N., & Learman, K. (2014). **Establishing the reliability and concurrent validity of physical performance tests using virtual reality equipment for community dwelling healthy elders.** *Disability and Rehabilitation*, 37(12), 1097-101.
2. De Rooij, C., Sletten, A., Thuraisamy, K., & Van Veen, S. (2016). **Een mixed-method onderzoek ter ondersteuning van het fysiotherapeutisch behandelproces van kwetsbare ouderen** [A mixed-method research of physical parameters for the standing Fox-game supporting the physical therapy treatment of frail elderly] (Unpublished Bachelor's thesis). Leiden University of Applied Sciences.
3. Faatz, T., Kerstens, Y., Sipkes, N., & Van Wensveen, R. (2015). **Hoe serieus is serious gaming?** [How serious is serious gaming?] (Unpublished Bachelor's thesis). Avans University of Applied Sciences.
4. Braam, M. (2014). **Een nieuwe output voor het mollenspel: Een onderzoek naar fysieke parameters geschikt voor het waarnemen en registreren van vooruitgang van spelers tijdens het mollenspel** [A new output for the mole game: A research to what physical parameters can monitor and register the progress of users playing the mole game] (Unpublished Bachelor's thesis). The Hague University of Applied Sciences.
5. Spoorenberg, R. (2019). **Het bepalen van functieverbetering met behulp van de SilverFit 3D. Welke uitkomstmaten zijn geschikt om functieverbetering van de bovenste extremiteit te bepalen met de SilverFit 3D?** [Determining functional improvement using the SilverFit 3D. Which outcome measures are suitable to determine functional improvement of the upper extremity using the SilverFit 3D?] (Unpublished Bachelor's thesis). De Haagse Hogeschool.
6. Bakker, M. (2019). **Why do physiotherapists not look at what they want?** (Unpublished Master's thesis). Utrecht University.

## SilverFit & Balance

1. Anders, P., Grønvik, K., Molde, I., Müller, H., Skjaeret-Maroni, N., & Vereijken, B. (2017). **Balance exergames improve movement characteristics of body weight transfer.** Poster presented at ESMAC (European Society for Movement analysis in Adults and Children) 26<sup>th</sup> Annual Meeting, Trondheim, Norway.
2. Skjaeret-Maroni, N., Vonstad, E.K., Ihlen, E.A., Tan, X.C., Helbostad, T.L., & Vereijken, B. (2016). **Exergaming in older adults: movement characteristics while playing stepping games.** *Frontiers in Psychology*, 7(964).
3. Skjaeret, N., Nawaz, A., Ystmark, K., Dahl, Y., Helbostad, J.L., Svanaes, D., & Vereijken, B. (2014). **Designing for movement quality in exergames: lessons learned from observing senior citizens playing stepping games.** *Gerontology*, 61(2), 186-194.

4. Nawaz, A., Skjaeret, N., Ystmark, K., Helbostad, J.L., Vereijken, B., & Svanaes, D. (2014). **Assessing seniors' user experience (UX) of exergames for balance training.** In *Proceedings of the 8th Nordic Conference on Human-Computer Interaction: Fun, Fast, Foundational: NordiCHI'14* (pp. 578-587). New York, USA: ACM.
5. Van Gastel, M., & Van der Burgt, R. (2012). **Verminderen van vallen met de SilverFit** [Reducing falls with the SilverFit]. *Fysiotherapie & Ouderenzorg*, 26(1), 11-17.
6. Flick, J.T., Gräper, C., De Gruyter, L.J.M., & De Snoo, E.K. (2017). **Zonder vallen en opstaan – Een veilige balanstraining door SilverFit en Balance Trainer (SFBT) bij Centraal Neurologische Aandoeningen? Een explorerend onderzoek** [Without falling and standing up – A safe balance training with SilverFit and Balance Trainer (SFBT) for people with Central Neurological Disorders? An exploratory research] (Unpublished Bachelor's thesis). Leiden University of Applied Sciences.
7. Ystmark, K. (2013). **The potential of the use of step-based exergames in balance training for senior citizens** (Unpublished Master's thesis). Norwegian University of Technology and Science.
8. De Bakker, P., & Klaveren, W.J. (2010). **Effect van training met de 'SilverFit' op rompstabiliteit en coördinatie van de onderste extremiteit bij adolescenten** [Effect of training with the 'SilverFit' on core stability and coordination of the lower extremity in adolescents] (Unpublished Bachelor's thesis). Amsterdam University of Applied Sciences.
9. De Deugd, J., & Willemse, J. (2010). **SilverFit virtual reality game as an evaluation tool for hip function** (Unpublished Bachelor's thesis). Avans University of Applied Sciences.

### SilverFit & Motivation

1. Pisica Donose, G., Razzolini, O., Bardgett, M. Lim, F., & Samarcq, L. (2017). **Impact of using the SilverFit Mile videos on training time.** Presented at congres fragilité, Paris, France.
2. Van Wezel, S. (2017). **Exergame balance training and conventional balance training among healthy elderly: Effects on motivation and exercise intensity** (Unpublished Master's thesis). VU University Amsterdam.
3. Saes, M.A.P.M. (2016). **Efficient virtual rehabilitation** (Unpublished Master's thesis). VU University Amsterdam.
4. Feenstra, A. (2014). **Kan fietsen in een virtuele omgeving leiden tot een verhoogde belastbaarheid bij kwetsbare ouderen?** [Will cycling in a virtual environment lead to increased exertion in frail elderly?] (Unpublished Bachelor's thesis). Avans University of Applied Sciences.
5. Van Oudheusden, P. (2013). **Virtual Reality in de ouderenrevalidatie** [Virtual reality in geriatric rehabilitation] (Unpublished Master's thesis). University of Applied Sciences Leiden.
6. Zegeling, A., Dekker, B., & De Wit, K. (2013). **Spelcomputers fun? Of tóch functioneel?** [Game computers fun? Or yet functional?] (Unpublished Bachelor's project). Amsterdam University of Applied Sciences.
7. Gerlofsma, N. (2018). **Technologie in de arm-/handrevalidatie bij CVA-patiënten** [Technology in rehabilitation of the arm-/hand function in stroke patients] (Unpublished Bachelor's thesis). Rotterdam University of Applied Sciences.
8. Van der Kooij, K., van Dijsseldonk, R., van Veen, M., Steenbrink, F., de Weerd, C., & Overvliet, K.E. (2019). **Gamification as a Sustainable Source of Enjoyment During Balance and Gait Exercises.** *Frontiers in Psychology*, 10(294).

9. Zeebregts, J., & de Grauw, P. (2020). **SilverFit Compact, toevoeging voor de revalidatie?** [SilverFit Compact, a good addition to rehabilitation?] (Unpublished Bachelor's thesis). Avans University of Applied Sciences.
10. Hofstra, F. (2021). **Assessing User Experience of Exergames by Elderly with Somatic Symptoms living in Nursing Homes** (Unpublished Master's thesis). Erasmus School of Health Policy & Management.

### SilverFit & Cognition

1. Anders, P., Lehmann, T., Müller, H., Grønvik, K.B., Skjaeret-Maroni, N., Baumeister, J., & Vereijken, B. (2018). **Exergames inherently contain cognitive elements as indicated by cortical processing.** *Frontiers in Behavioral Neuroscience*, 12(102).
2. Anders, P., Lehmann, T., Müller, H., Molde, I., Grønvik, K., Skjaeret-Maroni, N., Vereijken, B., & Baumeister, J. (2017). **Balance exergames increase cortical activity in frontal areas of the brain.** Poster presented at ESMAC (European Society for Movement analysis in Adults and Children) 26<sup>th</sup> Annual Meeting, Trondheim, Norway.
3. Sebregts, F., Van den Oudenalder, R., Konings, B., & Van Iersel, K. (2015). **Wat is het effect van 10 minuten matig intensief bewegen op de cognitie?** [What is the effect of exercise (10 minutes at a moderate intensity) on cognition?] (Unpublished Bachelor's thesis). Avans University of Applied Sciences.

### SilverFit & Dementia / Alzheimer's Disease

1. Pisica Donose, G., Marinescu, M., Razzolini, O., Bardgett, M., & Wiersinga, J. (2018). **Benefits and stress reduction for nursing home residents living with dementia through engaging in physical activities: participation and outcomes of "SilverFit" exergames.** Poster presented at congress "Fragilité du Sujet Âgé; Le Vieillissement Santé; Prévention de la Perte d'Autonomie 2018, Paris, France.
2. Chan, M. (2017). **Muziektherapie en de SilverFit Alois. Een adviesrapport** [Music therapy and the SilverFit Alois. An advisory report] (Unpublished Bachelor's thesis). Avans University of Applied Sciences.
3. Korian (2016). **Taking care of patients suffering from dementia and neurodegenerative diseases, TNM (non-medical techniques) project.** Presented at Silver Economy Expo, Paris, France.
4. Koning-van Zuilen, M., & Lindeboom, R. (2014). **Effecten van een bewegingsprogramma voor demente ouderen in het verpleeghuis op kwaliteit van leven** [The effects of an exercise programme on quality of life for people with dementia living in a care home]. *Fysiotherapie & Ouderenzorg*, 26(1), 11-17.
5. DAZ (2014). **Evaluatierapport 'Bewoners met dementie in beweging'** [Evaluation report 'Exercise for people living with dementia'] (Published online).
6. Van Gestel, L., Slot, C., Remijn, R., & Theunissen, J. (2015). **Het monitoren van beginnend dementerenden d.m.v. een spel element** [Monitoring people with dementia through the use of a game] (Unpublished Bachelor's work). Avans University of Applied Sciences.
7. De Bruin, L., Knuisting Neven, L., & Van Zanten, M. (2013). **SilverFit en mensen met dementie in beweging** [SilverFit exercises for people living with dementia] (Unpublished Bachelor's thesis). Rotterdam University of Applied Sciences.

8. Van Vliet, L. (2012). **Proposals for the SilverFit Alois, active entertainment for memory care** (Unpublished Master's thesis). University of Twente.
9. Bongaards, B., & Groen, C. (2018). **Dementie in beweging** [Dementia in motion] (Unpublished Bachelor's thesis). Avans University of Applied Sciences.
10. Van Santen, J., Dröes, R.M., Bosmans, J.E., Blanson Henkemans, O.A., Van Bommel, S., Hakvoort, E., . . . Meiland, F (2019). **The (cost-) effectiveness of exergaming in people living with dementia and their informal caregivers: protocol for a randomized controlled trial.** *BMC Geriatrics*, 19, 1-19.
11. De Winter, A. (2019). **Improving physical activity (PA) of elderly with dementia through exergaming. Factors affecting the facilitating role of the social environment** (Unpublished Master's thesis). Wageningen University.
12. Zijlstra-Pabbruwee, L. (2020). **Exergaming als aanvulling op de fysiotherapeutische behandeling; een virtueel oefenprogramma om ouderen met dementie meer in beweging te brengen** [Exergaming in addition to physiotherapy treatment; a virtual exercise program for elderly with dementia to exercise more regularly] (Unpublished Master's thesis). Avans Plus University of Applied Sciences.
13. Van Santen, J., Droës, R.M., Twisk, J.W.R., Blanson Henkemans, O.A.B., van Straten, A., & Meiland, F. (in press). **Effects of Exergaming on Cognitive and Social Functioning of People with Dementia: A Randomized Controlled Trial.** *Journal of the American Medical Directors Association*, 21(12), 1958-1967.
14. J.M., van Santen (2021). **Remember to play... and stay active! Evaluation of the effects, cost-effectiveness and implementation of exergaming for people living with dementia and their informal caregivers.** Vrije Universiteit Amsterdam. ISBN: 978-94-6332-795-4
15. Hendriks, C., van Santen, J., Dröes, R.M., Boverhof, M., & Meiland, F. (2021). **Op de fiets door de Italiaanse heuvels** [By bike through the Italian hills]. *Denkbeeld*, 33, 34–37.

### SilverFit & (Intellectual) Disabilities

1. Lexis, M. (2013). **Het stimuleren van lichaamsbeweging bij cliënten met verstandelijke beperkingen door de inzet van (informatie- en communicatie) technologie: een pilotstudie** [Stimulating physical exercise with clients with intellectual disabilities through the use of (information- and communication) technology: a pilot study] (Unpublished Bachelor's thesis). Zuyd University of Applied Sciences.

### SilverFit & Implementation

1. Nap, H. H., & Diaz-Orueta, U. (2013). **Rehabilitation gaming.** In S. Arnab, I. Dunwell, & K. Debattista (Eds.), *Serious games for healthcare: applications and implications* (pp. 50-75). Hershey, PA, USA: IGI Global.
2. Westdijk, P. (2016). **Implementatie van de SilverFit Alois op de Berkenhof; wat ging goed, wat kan beter?** [Implementation of the SilverFit Alois at the Berkenhof; what went well and what improvements could be made?] (Unpublished Bachelor's thesis). Arnhem and Nijmegen University of Applied Sciences.
3. Duindam, A., & Fischer, B. (2013). **Ouderen en bewegen: wensen en innovatie** [Eldery and exercise: wishes and innovation] (Unpublished Bachelor's thesis). The Hague University of Applied Sciences.

4. Moonen, J. (2012). **De Wii niet meer op je heupen hebben; het gebruik van serious games voor de revalidatie van ouderen** [Having fun with the Wii; the use of serious games for geriatric rehabilitation] (Unpublished Master's thesis). Avans Plus University of Applied Sciences.

### SilverFit & Rehabilitation at the Intensive Care

1. Fiks, T., Ruijter, A., Te Raa, M., & Spronk, P.E. (2016). **Interactive gaming is feasible and potentially increases ICU patients' motivation to be engaged in rehabilitation programs.** Poster presented at 36<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine, Brussel, Belgium.
2. Waaning, L. (2017). **Gamen op de intensive care. Het toepassen van technologie om mobilisatie op de intensive care te ondersteunen** [Gaming at the intensive care. The application of technology to support mobilization at the intensive care unit] (Unpublished Bachelor's thesis). The Hague University of Applied Sciences.
3. Van Veluwen, E. (2014). **Exergames op de Intensive-Careafdeling** [Exergames at the Intensive Care] (Unpublished Bachelor's thesis). The Hague University of Applied Sciences.
4. Oomkens, P. (2020). **Interactive Video Gaming on the Intensive Care Unit. Design and feasibility study of an interactive video gaming device used for patients on the intensive care unit for rehabilitation purposes** (Unpublished Master's thesis). Delft University of Technology.

### SilverFit & Home-Based Training

1. Dobner, S., Jogl, I., Mayer, T., Kolland, F., Freitag, H., Panovsky, S., ... Baltas, D. (2018). **Entertainment and Training on a Personalized Training Platform.** Poster presented at Smarter Lives Conference 2018, Innsbruck, Austria.
2. Hoogeboom, V. (2018). **Virtuele therapie voor hartpatiënten in een thuissituatie** [Virtual Therapy for patients with heart disease living at home] (Unpublished Bachelor's thesis). Rotterdam University of Applied Sciences.

### SilverFit & Respiratory Training

1. Verburg, A. (2016). **Blow your mind. Digitale ademhalingstraining voor ouderen** [Blow your mind. Digital flow exercises for elderly people] (Unpublished Bachelor's thesis). Amsterdam University of Applied Sciences.
2. Kaelen, M. (2016). **Medische Business Case 'SilverFit Flow'** [Medical Business Case 'SilverFit Flow'] (Unpublished Bachelor's thesis). Avans University of Applied Sciences.

### SilverFit & Dysphagia

1. Chiu, A.T.S., & Yip, C.C.K. (2018). **Effectiveness of game based biofeedback swallowing training in elderly: a quasi experimental study.** Presented at the 2018 International Occupational Therapy Conference, Kunming, Yunnan, China.
2. Lut, J., Spronk, L.E.J., Jansen, M., Hemler, R.B., Dekker-Holverda, E., Kröner, A., & Spronk, P.E. (2017). **Interactive gaming for evaluating dysphagia in ICU patients?** Abstract presented at Topics in IC Multidisciplinair Congress 2017, Lunteren, The Netherlands.
3. Van Snippenburg, W., Lut, J., Hofhuis, J.G.M., Flim, M., Hemler, R.B., Kröner, A., & Spronk, P.E. (2017). **Awareness and Management of Dysphagia in Dutch intensive care units: a**



- nationwide survey.** Abstract presented at Topics in IC Multidisciplinair Congress 2017, Lunteren, The Netherlands.
4. Spronk, L.E.J., Lut, J., Dekker, E., Jansen, M., Van Munster, B., Lemmens, J., . . . Spronk, P.E. (2017). **Dysphagia is severely under recognized in hospitalized patients.** Abstract presented at Topics in IC Multidisciplinair Congress 2017, Lunteren, The Netherlands.
  5. Te Rietstap, M. (2016). **Oral intake problems of patients suffering from dysphagia** (Unpublished Master's thesis). University of Twente.
  6. Van Snippenburg, W., Kröner, A., Flim, M., Dekker, E., Hemler, R., Buise, M., & Spronk, P. **Improving swallowing function in critically ill patients using an interactive gaming rehabilitation program.** Poster.
  7. Gnacke, E., & Mijnes, D. (2018). **sEMG-normaalwaarden van slikkracht en sliktiming in de ziekenhuispopulatie** [sEMG normal data for swallow force and swallow timing in the hospitalized population] (Unpublished Bachelor's thesis). Zuyd University of Applied Sciences.
  8. Helmhout, S. (2018). **Fitness voor het Slikken. Logopedische behandeling van slikstoornissen bij volwassenen met een verstandelijke beperking door biofeedback: werkt het?** [Fitness for swallowing. Speech therapy treatment for swallowing disorders in elderly with intellectual disabilities through biofeedback: what works?].
  9. Snoek, D. (2019). **Ervaringen van logopedisten met het gebruik van SilverFit Rephagia bij patiënten met de ziekte van Parkinson** [Experiences of speech language therapists using the SilverFit Rephagia for patients with Parkinson's disease] (Unpublished Bachelor's thesis). Hanzehogeschool Groningen University of Applied Sciences.
  10. Kerkdijk, E., van der Laak, M., Nieuwkamp, M., Zwaagstra, Y., & van Dusseldorp, L. (2018). **H36 Applicability of and experience with SilverFit Rephagia by patients with Huntington's disease in day care.** *Journal of Neurology, Neurosurgery & Psychiatry*, 89, A79-A80.
  11. Bice, E., & Galek, K.E. (2016). **The use of neuroplastic principles affects the swallow motor plan of a patient in severe cognitive decline: A case study.** *Perspectives of the ASHA Special Interest Groups*, 1(2).
  12. Galek, K.E., & Bice, E. (2020). **The Influence of Surface Electromyography Visual and Clinician Verbal Feedback on Swallow Effort Ratio at Different Bolus Volumes in a Healthy Population.** *Folia Phoniatrica et Logopaedica*, 73(6), 449-454.
  13. Galek, K.E., Bice, E., & Allen, K. (2021). **A Novel Protocol Designed to Treat Spastic Dysarthria Secondary to Traumatic Brain Injury: A Case Study.** *Perspectives of the ASHA Special Interest Groups*, 6, 542–552.

## 2. General Scientific Literature Review Virtual Therapy

### Virtual Therapy & General Health

1. Taylor, L., Kerse, N., Klenk, J., Borotkanics, R., & Maddison, R. (2018). **Exergames to improve mobility of long-term care residents: a cluster randomized controlled trial.** *Games for Health Journal*, 7(1), 37-42.
2. Loos, E., & Zonneveld, A. (2006). **Silver gaming: Serious fun for seniors?** In *International Conference on Human Aspects of IT for the Aged Population* (pp. 330-341). Springer International Publishing.

3. DeSmet, A., Van Ryckeghem, D., Compernelle, S., Baranowski, T., Thompson, D., Crombez, G., . . . De Boerdeaudhuij, I. (2014). **A meta-analysis of serious digital games for healthy lifestyle promotion.** *Preventive Medicine*, *69*, 95-107.
4. Chao, Y.Y., Scherer, Y.K., & Montgomery, C.A. (2014). **Effects of using Nintendo Wii™ exergames in older adults: a review of the literature.** *Journal of Aging and Health*, *27*(3), 379–402.
5. Sween, J., Wallington, S.F., Sheppard, V., Taylor, T., Llanos, A.A., & Adams-Campbell, L.L. (2014). **The role of exergaming in improving physical activity: a review.** *Journal of Physical Activity & Health*, *11*(4), 864-70.
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