Stage 2 Research

Cognitive Enhancement

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| Title | Author(s) | Summary | Year | Aim | Conclusion | Notes |
| Developing serious games to promote cognitive abilities for the elderly | Hongmei Chi; Edward Agama; Zornitza Genova Prodanoff | Created a suite of serious games for people living with dementia.  Maths game: (higher/lower)  Colour game: Visual memory grid game  Rock-Paper-Scissors: Traditional hand game  Question-answer game: Players are given information and quizzed on it.  MMSE test performed on participants before and after 6 weeks of gaming. | 2017 | Enhance cognitive skills in individuals. | Developed exercises were benefical.  Social participation could be a valuable feature of games. | Provide games freely.  Tested using a control group.  Mostly visual, but could be adapted to VA. |
| The effects of exercise training on elderly persons with cognitive impairment and dementia: A meta-analysis | Patricia Heyn PhD; Beatriz C. Abreu PhD, OTR; Kenneth J.Ottenbacher PhD, OTR | Literature review on studies of the effect of exercise on cognitive impairment.  Found that there was evidence of positive effects of physical exercise on cognitive functioning.  Recognise the need to motivate elders to exercise.  Recognise the results may be imprecise | 2004 |  |  |  |
| Cognitive and memory training in adults at risk of dementia: A Systematic Review | Nicola J Gates, Perminder S Sachdev, Maria A Fiatarone Singh & Michael Valenzuela | Lit review of cognitive exercises.  Featured studies of indviduals with mild cognitive impairment MCI |  |  | Moderate effects on memory  Few RCTs available |  |
| The effect of exercise on behavioral and psychological symptoms of dementia: towards a research agenda | Thuné-Boyle, I.C.V., Iliffe, S., Cerga-Pashoja, A., Lowery, D. and Warner, J. |  | 2012 |  |  |  |
| Serious games in cognitive training for Alzheimer's patients | Frédérick Imbeault; Bruno Bouchard; Abdenour Bouzouane |  |  |  |  |  |