

Multimedia Appendix 1. Summary of study characteristics in terms of study type, aim and sample.

| Authors | Aim | Sample | | | |
|---------------------------------------|---|--------|--|-----------|--|
| | | N | Age | Country | Population Type |
| Arean and colleagues, 2016 [24] | To test outcome and clinical patterns of three different mobile apps for depression | 626 | Mean: 33.9 SD:11.8 Range: - | USA | Adults with mild to moderate depression |
| Blackburne and colleagues, 2016 [25] | To examine the efficacy of a training programme for inhibitory control | 52 | Mean: 35.2 SD: 14.1 Range: 19-61 | Australia | overweight or obese adult. - training participant, -waitlist/ control |
| Bless and colleagues, 2014 [26] | To test the feasibility of an app for training attention | 28 | Mean: 23.3 e 23.9 Range: - | Norway | Healthy individuals -non-training control group -training control group |
| Hill and colleagues, 2015 [27] | To test the app feasibility | 9 | Mean: 76,1 SD: 5.5 Range: 64-96 | USA | Old Adults |
| Hill and colleagues, 2017 [28] | to evaluate the usability and acceptability of an app to train attention | 12 | Mean: 79 SD: 4.2 Range: - | USA | Old adults |
| Lorusso and colleagues, 2017 [29] | to evaluate learnability, usability, user satisfaction and quality of the interaction between an app to train language and children | 14 | Mean: 60.1 Month SD: 6.2 Range: 50-68 month | Italy | Children with mild to severe language impairments or delays |
| Lu and colleagues, 2017 [30] | to develop an improved design for game-based cognitive training for seniors using mobile devices. | 9 | 1Mean = 82.7 2Mean = 69.6 SD1 = 7.2 SD2 = 9.4 1= 4 e 2= 5 Range1: 73-90 Range2:61-84 | Taiwan | Old Adults |
| Powell and colleagues, 2017 [31] | To develop and test an app to train problem-solving in everyday life for patients following brain injury. | 23 | Mean: 44 SD:15 Range: 20-75 | USA | Brain injuries in adults. -Control group, - Intervention |
| Shellington and colleagues, 2017 [32] | to explore the feasibility and utility of an app to deliver physical exercise outside the laboratory | 20 | Mean: 68 SD: 5.4 Range: 59-76 | Canada | Older adults with and without Subjective Cognitive Complaints (SCC) and Mild Cognitive |