

Additional file 2 Coding scheme based on qualitative data

Code		AR Virtual Museum	VR HEMI-RehApp	AR Balloon Popping	f Total	n
777	Residual category	5	4	4	13	5
888	Not interpretable	1	1	4	6	4
999	No answer	12	5	17	34	9
1. Positive						
1	Residual	0	0	0	0	0
1.1	Overall	5	1	1	7	4
1.2	Instructions	0	0	0	0	0
1.3	Feedback / Reward	0	0	0	0	0
1.4	Motivation	1	1	1	3	3
1.5	Difficulty / Challenge	0	1	0	1	1
1.6	Applicability	0	0	1	1	1
1.6.1	Multi-purposed	1	1	3	5	4
1.6.2	Motor rehabilitation	0	0	2	2	2
1.6.3	Neglect rehabilitation	4	0	3	7	7
1.6.4	Psychoeducation	0	0	2	2	2
1.6.5	Therapy with help of therapist	2	2	1	5	3
1.6.6	Play autonomously	1	1	2	4	2
1.7	Flexibility /Variation	0	0	0	0	0
2. Negative						
2	Residual	0	0	0	0	0
2.1	General	3	1	5	9	7
2.2	Instructions	0	2	4	6	4
2.3	Feedback / Reward	0	1	0	1	1
2.4	Motivation	3	0	0	3	3
2.5	Difficulty / Challenge	1	1	1	3	3
2.6	Applicability	0	0	0	0	0
2.6.1	Play autonomously	0	0	0	0	0
3. Suggestions						
3	Residual	0	0	0	0	0
3.1	Not usable yet, has potential	3	3	4	10	3
3.1.1	Versatile	0	2	2	4	4
3.1.1.1	Motor disabilities	2	1	2	5	4
3.1.1.2	Cognitive disabilities	0	2	1	3	3
3.1.1.3	Other disabilities	0	0	3	3	3
3.1.2	Theme / Game content	2	1	0	4	3
3.1.3	Difficulty / Challenge	0	1	0	1	1
3.1.4	Instructions	0	2	1	3	2
3.1.5	Feedback / Reward	4	1	1	6	3
3.1.6	Other suggestions for improvement	1	0	2	4	3

3.1.7	Flexibility /Variation	4	1	2	7	4
3.2	Need for assistance for the game	4	3	11	18	6
3.3	Need for insights of game performance	1	1	4	6	4
3.3.1	Accuracy	3	3	6	12	7
3.3.2	Duration	2	2	4	8	5
3.3.3	Search strategy / Movement / Gaze direction	4	2	3	9	6
3.3.4	Other innovative outcome measures	2	1	2	5	3

Note: Frequency of code appearance is displayed split per game and the portion of n=13 therapists that mentioned the code is displayed in the last column.