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| **Contribution** | **For** | **Against** |
| Unobtrusive Tracking | A. Corrêa et. al., "Gear VR and Leap Motion Sensor Applied in Virtual Rehabilitation for Manual Function Training" - Leap Motion |  |
| Y. Shen et. al., "Hand Rehabilitation based on Augmented Reality" - Camera + Data Glove |
| J. Vieira et. al., "Augmented Reality for Rehabilitation Using Multimodal Feedback" - SleeveAR |
| F. Marco et. al., "Improving Postures Design in Virtual Rehabilitation Environments" - Microsoft Kinect |
| R. Lipovský et. al., "Self hand-rehabilitation system based on wearable technology" - Robotic Glove |
| C. Kaluarachchi et. al., "Self-Rehabilitation based on User Interactive Environment" - Nintendo Wii Controller |
| M. Daoud et. al., "An Interactive Rehabilitation Framework for Assisting People with Cerebral Palsy" - Microsoft Kinect |
| J. Valls et. al., "Virtual Web Environment to Design Rehabilitation Exercises through Movement-Based Interaction" - Microsoft Kinect |
| I. Jung et. al., "Ubiquitous Gamification Framework for Stroke Rehabilitation Treatment based on the Web Service" - Microsoft Kinect |
| M. Khademi et. al., "Free-hand interaction with leap motion controller for stroke rehabilitation" - Leap Motion |
| S. Banerji et. al., "Upper extremity rehabilitation after stroke: Biofeedback gaming for attention and muscle use" - Therapy Gloves |
| J. Hallam et. al., "Interactive therapy gloves: Reconnecting partners after a stroke" - Therapy Gloves |
| D. Ebert et. al., "Development and evaluation of a unity-based, kinect-controlled avatar for physical rehabilitation" - Micrisoft Kinect |
| H. Hoffman et. al., "Immersive Virtual Reality for Reducing Experimental Ischemic Pain" - Polhemus Fastrak |
| G. Lewis et. al., "Virtual reality games for rehabilitation of people with stroke: perspectives from the users" - Forearm and wrist shaped cast mounted on a six degree-of-freedom load cell |
| Focus on Upper-limb | H. Bohle et. al., "Behavioral and neural correlates of cognitive-motor interference during multitasking in young and old adults." - Gait Exercises | Bank et. al., "Cognitive‐motor interference during goal‐directed upper‐limb movements" |
| T. Klotzbier et. al., "Cognitive-motor interference during fine and gross motor tasks in children with Developmental Coordination Disorder (DCD)." - Gait Exercises |
| T. Klotzbier et. al., "Cognitive-motor interference during walking in older adults with probable mild cognitive impairment." - Gait Exercises |
| J. Cockburn et. al., "Changing patterns of cognitive-motor interference (CMI) over time during recovery from stroke" - Gait Exercises (?) |
| P. Plummer et. al., "Cognitive-motor interference during functional mobility after stroke: state of the science and implications for future research." - Gait Exercises |
| L. Yang et. al., "Reliability and Validity of Dual-Task Mobility Assessments in People with Chronic Stroke" - Walking Exercises |
| Y. Yang et. al., "Dual-Task Exercise Improves Walking Ability in Chronic Stroke: A Randomized Controlled Trial" - Walking Exercises |
| Y. Yang et. al., "Dual-task-related gait changes in individuals with stroke" - Gait Exercises |
| P. Plummer et.al., "Feasibility of Dual-Task Gait Training for Community-Dwelling Adults after Stroke: A Case Series" - Gait Exercises |
| D. Hyndman et. al., "Reduced Sway During Dual Task Balance Performance Among People With Stroke at 6 and 12 Months After Discharge From Hospital" - Balance Exercises |
| P. Plummer et.al., "Effects of Physical Exercise Interventions on Dual - Task Gait Speed Following Stroke: A Systematic Review and Meta - Analysis" - Gait Study |
| R. Vance et. al., "Dual Tasking With the Timed “Up & Go” Test Improves Detection of Risk of Falls in People With Parkinson Disease" - Gait Study |
| C. Strouwen et. al., "Test-Retest Reliability of Dual-Task Outcome Measures in People With Parkinson Disease" - Gait Study |
| M. Pang et. al., "Dual-Task Exercise Reduces Cognitive-Motor Interference in Walking and Falls After Stroke" - Walking Exercises (uses upper-limb as control study group) |
| Ecologically-valid feedback | C. Strouwen et. al., "Test-Retest Reliability of Dual-Task Outcome Measures in People With Parkinson Disease" - Presents one ecologically-valid situation, which is typing on the phone while walking | J. Câmara et. al., "Efficacy of adaptive cognitive training through desktop virtual reality and paper‑and‑pencil in the treatment of mental and behavioral disorders" - Various ecologically valid scenarios presented in Reh@City v2.0 tasks |
| M. Pang et. al., "Dual-Task Exercise Reduces Cognitive-Motor Interference in Walking and Falls After Stroke" - Cognitive tasks: say words in specific category and serial-3-subtractions from a randdom number between 90-100 (not ecologically-valid) | Some of the papers established as “For”, present one or two scenarios that are ecologically valid, but in majority, the ones presented in each paper are not ecologically-valid |
| P. Plummer et. al, "Effects of Physical Exercise Interventions on Dual - Task Gait Speed Following Stroke: A Systematic Review and Meta - Analysis" - The exact cognitive exercises are not described, only that they are various types of arithmetic, counting, memory and verbal tasks |
| C. Strouwen et. al., "Determinants of Dual-Task Training Effect Size in Parkinson Disease: Who Will Benefit Most?" - Same exercises as C. Strouwen et. al., "Test-Retest Reliability of Dual-Task Outcome Measures in People With Parkinson Disease" |
| J. Verghese et. al., "Validity of Divided Attention Tasks In Predicting Falls in Older Individuals: A Preliminary Study" - Letter reciting (not Ecologicallly valid) |
| L. Yang et. al., "Reliability and Validity of Dual-Task Mobility Assessments in People with Chronic Stroke" - Same exercises as M. Pang et. al., "Dual-Task Exercise Reduces Cognitive-Motor Interference in Walking and Falls After Stroke" |
| P. Plummer et. al., "Cognitive-motor interference during functional mobility after stroke: state of the science and implications for future research." - It was described one ecologically-valid scenario, remebering items in a shopping list, but the other tasks were not ecologically-valid |
| Y. Yang et. al., "Dual-task-related gait changes in individuals with stroke" - Ecologically-valid scenarios but the study of dual task effects are for motor-motor dual tasks, not cognitive-motor |
| CMI Database |  |  |