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Major Research Area	Neurological Physical Therapy Neurophysiology Physical Agents Health Promotion in Elderly

Education

Ph.D., Physiology, National Yang-Ming University
Bachelor, Physical Therapy, National Yang-Ming University

Experience

Professor, Department of Physical Therapy and Assistive Technology, National Yang-Ming University
Dean, Department of Physical Therapy and Assistive Technology, National Yang-Ming University
Research Fellow, Medical Research and Education Department, Taipei City Hospital
Professor, Department & Institute of Physical Therapy, National Yang-Ming University
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Assistant Professor, Department & Institute of Physical Therapy, National Yang-Ming University
Lecturer, Department & Institute of Physical Therapy, National Yang-Ming University
Adjunct Physical Therapist, Huei Kang Clinic
Adjunct Research Assistant, Institute of Physiology, Yang-Ming University

Courses

Trend of Neurological Physical Therapy
Fundamental Physical Therapy
Fundamental Physical Therapy and Practice
Therapeutic Physical Agents
Therapeutic Physical Agents Lab
Practical Applications of Neurological Physical Therapy

Publications

1. Lee MY, Wang RY, Hsu SS, Yang WW, Chen SS, Yang YR*. Muscle activation and intermuscular coherence during forward and backward pedaling. *Chin J Physiol* Accepted. (SCI)
Ministry of Science and Technology (MOST 105-2314-B-010-059-MY2)
2. Chang HY, Lee YY, Wu RM, Yang YR, Luh JJ. Effects of rhythmic auditory cueing on stepping in place in patients with Parkinson's disease. *Medicine* 98(45):e17874, 2019. DOI: 10.1097/MD.00000000000017874. (SCI)
3. Cheng FY, Jovita M, Mok HY, Lee YS, Tee HX, Wang RY, Yang YR*. Effects of fibular tape and traditional tape on functional performance in individuals with functional ankle instability: a randomized controlled trial. *Formos J Phys Ther* 44:221-230, 2019.
4. Yang YR[#], Cheng SJ[#], Lee YJ, Liu YC, Wang RY*. Cognitive and motor dual task gait training exerted specific training effects on dual task gait performance in individuals with Parkinson's disease: a randomized controlled pilot study. *PLoS One* 14(6): e0218180, 2019. DOI: 10.1371/journal.pone.0218180. (SCI)
Ministry of Science and Technology (MOST 103-2314-B-010-002-MY3)
5. Chen IH, Yang YR, Lu CF, Wang RY*. Novel gait training alters functional brain connectivity during walking in chronic stroke patients: a randomized controlled pilot trial. *J Neuroeng Rehabil* 16(1):33, 2019. DOI: 10.1186/s12984-019-0503-2. (SCI)
National Health Research Institutes (NHRIEX100-10039EI, NHRIEX101-10039EI) and Ministry of Science and Technology (MOST-103-2314-B-010-002-MY3)
6. Liu HH, Yeh NC, Wu YF, Yang YR, Wang RY, Cheng FY*. Effects of Tai Chi exercise on reducing falls and improving balance performance in Parkinson's disease: A meta-analysis. *Parkinsons Dis* 2019: 9626934, 2019. DOI: 10.1155/2019/9626934. (SCI)
7. Wang RY, Wang FY, Huang SF, Yang YR*. High-frequency repetitive transcranial magnetic stimulation enhanced treadmill training effects on gait performance in individuals with chronic stroke: a double-blinded randomized controlled pilot trial. *Gait Posture* 68:382-387, 2019. (SCI)
National Science Council (NSC98-2314-B-010-004-MY3)
8. Lin YC[#], Sow LC[#], Wang WY[#], Wang RY, Yang YR*. Effects of exergame on balance in individuals with Parkinson's disease: a meta-analysis and systematic review. *Formos J Phys Ther* 44:206-219, 2019.
Ministry of Science and Technology (Most 107-2314-B-010-041-MY3)
9. Chen JL, Wang RY, Lee CS, Chen YJ, Yang YR*. Immediate effect of hip taping on balance and walking ability in cane-dependent ambulators with chronic stroke: a randomized controlled trial. *Eur J Phys Rehabil Med* 55:156-161, 2019. DOI: 10.23736/S1973-9087.18.05300-5. (SCI)
Ministry of Science and Technology (MOST 105-2314-B-010-059-MY2)
10. Lee MY, Wang RY, Hsu SS, Chen SS, Yang YR*. Effects of reversed cycling training on stiff knee gait after stroke: two case reports. *Formos J Phys Ther* 44:69-76, 2019.
Ministry of Science and Technology (MOST 105-2314-B-010-059-MY2)
11. Yang YR, Mi PL, Huang SF, Chiu SL, Liu YC, Wang RY*. Effects of neuromuscular electrical stimulation on gait performance in chronic stroke with inadequate ankle control: a randomized controlled trial. *PLoS One* 13(12):e0208609, 2018. DOI: 10.1371/journal.pone.0208609. (SCI)
National Science Council (NSC 100-2314-B-010-022-MY2)

12. Liu YC, Yang YR, Tsai YA, Wang RY*, Lu CF*. Brain activation and gait alteration during cognitive and motor dual task walking in stroke: a functional near-infrared spectroscopy study. *IEEE Trans Neural Syst Rehabil Eng* 26:2416-2423, 2018. DOI: 10.1109/TNSRE.2018.2878045. (SCI)
Ministry of Science and Technology (MOST-103-2314-B-010-002-MY3)
13. Tsaih PL, Chiu MJ, Luh JJ, Yang YR, Lin JJ, Hu MH*. Practice variability combined with task-oriented electromyographic biofeedback enhances strength and balance in people with chronic stroke. *Behav Neurol*, 2018:7080218, 2018. DOI: 10.1155/2018/7080218. (SCI)
14. Cheng FY, Yang YR, Wu YR, Cheng SJ, Wang RY*. Beta event-related desynchronization can be enhanced by different training programs and is correlated with improved postural control in individuals with Parkinson's disease. *IEEE Trans Neural Syst Rehabil Eng* 26:1957-1964, 2018. DOI: 10.1109/TNSRE.2018.2868140. (SCI)
Ministry of Science and Technology (MOST 103-2314-B-010-002-MY3)
15. Wang RY, Zhou JH, Huang YC, Yang YR*. Reliability of the Chinese version of the Trail Making Test and Stroop Color and Word Test among older adults. *Int J Gerontol* 12:336-339, 2018. DOI: 10.1016/j.ijge.2018.06.003. (SCI)
National Science Council (NSC100-2314-B-010-021-MY2)
16. Wang RY, Huang FY, Soong BW, Huang SF, Yang YR*. A randomized controlled pilot trial of game-based training in individuals with spinocerebellar ataxia type 3. *Sci Rep* 8:7816, 2018. DOI: 10.1038/s41598-018-26109-w. (SCI)
National Science Council (NSC100-2314-B-010-021-MY2)
17. Wang RY, Wang YL, Cheng FY, Chao YH, Chen CL, Yang YR*. Effects of a multicomponent exercise on dual-task performance and executive function among older adults. *Int J Gerontol* 12:133-138, 2018. DOI: 10.1016/j.ijge.2018.01.004. (SCI)
National Science Council (NSC100-2314-B-010-021-MY2)
18. Shih YF*, Yu HT, Chen WY, Liao KK, Lin HC, Yang YR. The effect of additional joint mobilization on neuromuscular performance in individuals with functional ankle instability. *Phys Ther Sport* 30:22-28, 2018. DOI: 10.1016/j.ptsp.2017.12.001. (SCI)
19. Yang YR[#], Luo HJ[#], Huang WC, Wu HY, Wang RY*. Effects of different exercise modes on physical function and activity in older adults. *Formos J Phys Ther* 42:257-267, 2017.
National Science Council (NSC100-2314-B-010-021-MY2)
20. Peng LN, Lu WH, Liang CK, Chou MY, Chung CP, Tsai SL, Chen ZJ, Hsiao FY, Chen LK, Taiwan Stroke Postacute Care (PAC) Study Group. Functional outcomes, subsequent healthcare utilization, and mortality of stroke postacute care patients in Taiwan: a nationwide propensity score-matched study. *J Am Med Dir Assoc* 18(11):990.e7-990.e12, 2017. DOI: 10.1016/j.jamda.2017.06.020. (SCI)
21. Cheng FY, Yang YR, Wu YR, Cheng SJ, Wang RY*. Effects of curved-walking training on curved-walking performance and freezing of gait in individuals with Parkinson's disease: A randomized controlled trial. *Parkinsonism Relat Disord* 43:20-26, 2017. DOI: 10.1016/j.parkreldis.2017.06.021. (SCI)
Ministry of Science and Technology (MOST 103-2314-B-010-002-MY3)
22. Liu YC, Yang YR, Tsai YA, Wang RY*. Cognitive and motor dual task gait training improve dual task gait performance after stroke: a randomized controlled pilot trial. *Sci Rep* 7(1):4070, 2017. DOI: 10.1038/s41598-017-04165-y. (SCI)
Ministry of Science and Technology (MOST 103-2314-B-010-002-MY3)

23. Zhou JH[#], Hsu KN[#], Chen JL[#], Wang RY, Yang YR*. Effects of hydrotherapy in patients with multiple sclerosis: systematic review & meta-analysis. *Formos J Phys Ther* 42: 95-105, 2017.
24. Chen CL*, Yu NY, Tang JS, Chang SH, Yang YR, Wang L. Effect of yelling on maximal aerobic power during an incremental test of cycling performance. *J Sport Health Sci* 5:456-461, 2016. (SSCI & SCI)
25. Cheng FY, Yang YR, Chen LM, Wu YR, Cheng SJ, Wang RY*. Positive effects of specific exercise and novel turning-based treadmill training on turning performance in individuals with Parkinson's disease: a randomized controlled trial. *Sci Rep* 6:33242, 2016. DOI: 10.1038/srep33242. (SCI)
Ministry of Science and Technology (MOST 103-2314-B-010-002-MY3) and Cheng Hsin General Hospital (Grant No. 102F218C10)
26. Shih MC, Wang RY, Cheng SJ, Yang YR*. Effects of a balance-based exergaming intervention using the Kinect sensor on posture stability in individuals with Parkinson's disease: a single-blinded randomized controlled trial. *J Neuroeng Rehabil* 13(1):78, 2016. DOI: 10.1186/s12984-016-0185-y. (SCI)
National Science Council (NSC100-2314-B-010-021-MY2)
27. Chiou SY, Wang RY, Liao KK, Yang YR*. Facilitation of the lesioned motor cortex during tonic contraction of the unaffected limbs corresponds to motor status following stroke. *J Neurol Phys Ther* 40:15-21, 2016. DOI: 10.1097/NPT.000000000000109. (SCI)
Ministry of Education, Aim for the Top University Plan of National Yang-Ming University, Taiwan (98A-C-D160) and National Science Council (NSC96-2628-B-010-007-MY2)
28. Liao YY, Yang YR, Wu YR, Wang RY*. Virtual reality based Wii Fit training in improving muscle strength, sensory integration ability and walking abilities in patients with Parkinson's disease: a randomized control trial. *Int J Gerontol* 9:190-195, 2015. (SCI)
29. Liu YC[#], Mi PL[#], Shih MC[#], Lo SS, Wang RY, Yang YR*. Therapeutic effects of electrical stimulation on ankle spasticity in individuals with stroke: a meta-analysis. *Formos J Phys Ther* 40:179-187, 2015.
30. Yang YR, Chen YH, Chang HC, Chan RC, Wei SH, Wang RY*. Effects of interactive visual feedback training on post-stroke pusher syndrome: a pilot randomized controlled study. *Clin Rehabil* 29:987-993, 2015. DOI: 10.1177/0269215514564898. (SCI)
National Science Council (NSC100-2314-B-010-022-MY2) and Ministry of Education, Aim for the Top University Plan of National Yang-Ming University, Taiwan (102AC-P508)
31. Chang HC, Huang YJ, Wang RY, Yang YR*. Effects of enriched environment on motor learning improvement in 6-hydroxydopamine-induced Parkinson's rats. *Adapt Med* 7:129-135, 2015.
National Science Council (NSC 102-2314-B-010-003-MY2)
32. Liao YY, Yang YR, Cheng SJ, Wu YR, Fuh JL, Wang RY*. Virtual reality-based training to improve obstacle-crossing performance and dynamic balance in patients with Parkinson's disease. *Neurorehab Neural Re* 29:658-667, 2015. DOI: 10.1177/1545968314562111. (SCI)
National Science Council (NSC100-2314-B-010-022-MY2) & Ministry of Education, Aim for the Top University Plan of National Yang-Ming University, Taiwan (101AC-P508)
33. Wang RY, Wang YL, Cheng FY, Chao YH, Chen CL, Yang YR*. Effects of combined exercise on gait variability in community-dwelling older adults. *Age* 37(3):9780, 2015. DOI: 10.1007/s11357-015-9780-2. (SCI)
National Science Council (NSC100-2314-B-010-021-MY2)

34. Lu CF[#], Liu YC[#], Yang YR, Wu YT*, Wang RY*. Maintaining gait performance by cortical activation during dual-task interference: a functional near-infrared spectroscopy study. *PLoS One* 10(6):e0129390, 2015. DOI: 10.1371/journal.pone.0129390. (SCI)
National Science Council (NSC102-2221-E-010-013-MY3 and NSC102-2314-B-010-059), Ministry of Science and Technology (MOST103-2314-B-01-002-MY3), and Taipei City Hospital (102TPECH10)

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