

*鄭智修助理教授

所有發表期刊論文及研討會論文

期刊論文

1. Cheng HY, Ju YY, Chen CL, Chuang LL, **Cheng CH*** (2014) Effects of whole body vibration on spasticity and lower extremity function in children with cerebral palsy. *Human Movement Science*, 24;39C:65-72 (SCI)
2. **Cheng CH**, Su HT, Yen LW, Liu WY, Cheng HYK* (2014) Long-term Effects of Therapeutic Exercise on the Nonspecific Chronic Neck Pain. *Journal of Physical Therapy Science*, accepted (SCI)
3. Chen CY, Chang CW, Lee ST, Chen YC, **Cheng CH**, Lin YH* (2014) Is rehabilitation intervention during hospitalization enough for functional improvements in patients undergoing lumbar decompression surgery: a prospective randomized controlled study? *Clinical Neurology and Neurosurgery*, 128: S1-S5 (SCI)
4. Huang WP, Wang CC, Hung JH, Chien KC, Liu WY, **Cheng CH**, Ng HH, Lin YH* (2014) Joystick-Controlled Video Console Game Practices for Power Wheelchairs Indoor Driving Skills. *Journal of Physical Therapy Science*, accepted (SCI)
5. **Cheng CH**, Ju YY, Chang HW, Chen CL, Pei YC, Tseng KC, Cheng HY* (2014) Motor impairments screened by the Movement Assessment Battery for Children-2 are related to the visual-perceptual deficits in children with Developmental Coordination Disorder. *Research in Developmental Disabilities*, 35(9):2172-9 (SSCI)
6. Chien A, Lai DM, **Cheng CH**, Wang SF, Hsu WL, Wang JL* (2014) Translation, Cross-cultural Adaptation, and Validation of A Chinese Version of the Japanese Orthopaedic Association Cervical Myelopathy Evaluation Questionnaire (JOACMEQ). *Spine*, 39(12): 963-970 (SCI)
7. **Cheng CH**, Cheng HYK, Chen CPC, Lin KH, Liu WY, Wang SF, Hsu WL*, ChuangYF (2014) Altered co-contraction of cervical muscles in young adults with chronic neck pain during voluntary neck motions. *Journal of Physical Therapy Science*, 26(4): 587-590 (SCI)
8. Hsu WL, Lin KH, Yang RS, **Cheng CH** (2014) Use of motor abundance in old adults in the regulation of a narrow-based stance. *European Journal of Applied Physiology*, 114:261-71 (SCI)
9. 鄭智修、蘇皓琮、劉文瑜、王淑芬、徐瑋勵、莊育芬 (2013)。系統性回顧：退化性頸椎脊髓病變病患的非手術及術後之運動訓練策略。物理治療，38(4):279-85

10. Cheng HYK, Lien YJ, Yu YC, Ju YY, Pei YC, **Cheng CH**, Wu DBC (2013) The effect of lower body stabilization and different writing tools on writing biomechanics in children with cerebral palsy. *Research in Developmental Disabilities*, 34:1152-9 (SSCI)
11. Ju YY, Lin JK, Cheng HYK, **Cheng CH**, Wong AMK (2013) Rapid repetitive passive movement promotes knee proprioception in the elderly. *European Review of Aging and Physical Activity*, 10: 133-9 (SCI)
12. Chu YH, **Cheng CH**, Tang PH*, Lin KH (2012) Effects of age and step direction on behavioral performances and center-of-pressure characteristics of volitional stepping in older and young adults, *Biomedical Engineering-Applications Basis Communications*, 24:207-16 (SCI)
13. Chen HM, Lee CS, **Cheng CH*** (2012) The weight of computer mouse affects the wrist motion and forearm muscle activity during fast operation speed task, *European Journal of Applied Physiology*, 112:2205-12 (SCI)
14. 劉文瑜、陳芳婕、郭重顯、林燕慧*、鄭智修、陳廷碩、俞玉智 (2011)。初步比較腦性麻痺兒童使用搖桿式與雙邊滑動式操控介面操作電動輪椅之姿勢排列。物理治療，36(3):216-24
15. **Cheng CH**, Chen PJ, Kuo YW, Wang JL (2011) Effects of disc degeneration and muscle dysfunction on the cervical spine stability from a biomechanical study, *Proceedings of the Institution of Mechanical Engineers. Part H, Journal of engineering in medicine*, 225(2):149-57 (SCI)
16. 劉文瑜、廖佳芳、連恒裕、鄭智修、黃美涓、林燕慧 (2010)。以國際健康功能與身心障礙分類系統分析互動式電腦遊戲對於腦性麻痺兒童的影響。物理治療，35(3):251-62
17. **Cheng CH**, Wang JL, Lin JJ, Wang SF, Lin KH (2010) Position accuracy and electromyographic responses during head reposition in young adults with chronic neck pain, *Journal of Electromyography & Kinesiology*, 20: 1014-20 (SCI)
18. **Cheng CH**, Chang LW, Lin KH (2010) Determination of Foot-Plate Spacing for Swivel Walkers by an Optimization Method, *Biomedical Engineering-Applications Basis Communications*, 22(3): 213-21 (SCI)
19. Chu YH, Tang PF, Chen HY, **Cheng CH** (2009) Altered muscle activation characteristics associated with single volitional forward stepping in middle-aged adults, *Clinical Biomechanics* 24(9): 735-43 (SCI)
20. Wang JL, Wu TK, Lin TC, **Cheng CH**, Huang SC (2008) Rest cannot always recover the dynamic properties of fatigue-loaded intervertebral disc, *Spine* 33(17): 1863-9 (SCI)
21. **Cheng CH**, Lin KH, Wang JL (2008) Co-contraction of cervical muscles during

- sagittal and coronal neck motions at different movement speeds, *European journal of applied physiology* 103(6): 647-54 (SCI)
22. **Cheng CH**, Chen PJ, Kuo YW, Wang JL (2008) The compensation mechanism of cervical muscle dysfunction on spinal stability - An in vitro study using porcine model, *Journal of the Chinese Institute of Engineers* 31(4): 605-13 (SCI)
 23. **Cheng CH**, Chen TY, Kuo YW, Wang JL (2008) The mechanics of cervical muscle recruitment on cervical spine stability - A biomechanical in vitro study using porcine model, *Journal of Mechanics* 24: 63-8 (SCI)
 24. **Cheng CH**, Chen TY, Kuo YW, Wang JL (2007) The comparison of neutral zone, range of motion and resultant force and moment among different cervical muscle dysfunctions, *Journal of Biomechanics*, 40: S696 (SCI)
 25. **Cheng CH**, Lin KH, Lin JJ, Wang JL (2007) Effect of movement speed on cervical muscle activation pattern in healthy adults: voluntary response index analysis, *Journal of Biomechanics*, 40: S413 (SCI)
 26. **Cheng CH**, Lin KH, Lin JJ, Wang JL (2007) Cervical electromyographic activities during neck movements at different speeds in healthy subjects: voluntary response index analysis, *Biomedical Engineering-Applications Basis Communications*, 19(6): 349-57 (SCI)

研討會論文

1. Hsu WL*, **Cheng CH**, Wang SF, Lai DM, Wang JL, Su HT. Upright balance stability after surgical management of cervical spondylotic myelopathy. International Scientific Meeting on Biomechanics, 2014 (Oral Presentation)
2. Chung HC, Cheng HYK, **Cheng CH***. Effect of knee brace on the loading of the lower extremity during sit-to-stand and stand-to-sit tasks. International Scientific Meeting on Biomechanics, 2014 (Oral Presentation) (Corresponding author)
3. Chen RW, Cheng HYK, **Cheng CH***. The muscle activation and postural control pattern of the skilled and non-skilled badminton players during overhead stroke. International Scientific Meeting on Biomechanics, 2014 (Oral Presentation) (Corresponding author)
4. **Cheng CH***, Su HT, Wang JL, Lai DM, Wang SF, Hsu WL, Chang YL, Chung HC. Characteristics of Postural Control Dynamics in Patients with Cervical Spondylotic Myelopathy after Surgery and Post-Surgery Exercise Training. Annual Meeting of Orthopaedic Research Society, 2015 (Corresponding author)
5. Hsu WL, Wang SF, Wang JL, Lai DM, Su HT, **Cheng CH***. Balance control

- following surgical management of cervical spondylotic myelopathy. World Congress of Biomechanics, 2014 (Corresponding author)
6. **Cheng CH**, Ju YY, Lin YC, Cheng HYK*. Effects of sloped surfaces on the postural control in standing workers after prolong standing. World Congress of Biomechanics, 2014
 7. 簡溫原, 賴達明, 鄭智修, 王淑芬, 徐瑋勵, 王兆麟。 Translation, cross-cultural adaptation, and validation of a Chinese version of the Japanese Orthopaedic Association Cervical Myelopathy Evaluation Questionnaire。 中華民國骨科醫學會 103 年度第 66 次春季聯合學術研討會。 臺中：榮民總醫院。
 8. 陳立穎, 鄭智修, 曾俊儒, 朱彥穎, 程欣儀*。 兒童發展檢核表多媒體系統開發與臨床測試。 第四次 TSICF 學會暨第三次 TREATS 學會聯合學術研討暨論文發表大會, 2014
 9. 王雅秋, 俞雨春, 鄭智修, 曾俊儒, 程欣儀*。 依功能導向判斷輔具需求-以行動類與擺位類輔具為例。 第四次 TSICF 學會暨第三次 TREATS 學會聯合學術研討暨論文發表大會, 2014
 10. Chung HC, Chen RW, Cheng HYK, **Cheng CH***. Effect of knee brace on lower extremity during sit-to-stand task. Joint Meeting of TSICF & TREATS, 2014 (Corresponding author)
 11. Chen RW, Chung HC, Cheng HYK, **Cheng CH***. Control pattern of upper extremity during overhead stroke. Joint Meeting of TSICF & TREATS, 2014 (Corresponding author)
 12. **Cheng CH***, Su HT, Wang JL, Lai DM, Wang SF, Hsu WL, Chen RW. Postural control in patients with cervical spondylotic myelopathy after surgery and post-surgery exercise training. Annual Meeting of Orthopaedic Research Society, 2014 (Corresponding author)
 13. Chien A, Wang SF, Hsiao CH, Hsieh NY, **Cheng CH**, Hsu WL, Lai DM & Wang JL. Evidence of cervical multifidus muscle wasting in patients undergone surgery for cervical spondylotic myelopathy. 6th World Confederation for Physical Therapy-Asia Western Pacific Region Conference, 2013 (Oral Presentation)
 14. Chien A, Wang SF, Hsiao CH, Hsieh NY, **Cheng CH**, Hsu WL, Lai DM & Wang JL. Clinical prognostic indicators of surgical outcome in cervical spondylotic myelopathy: a pilot study. 6th World Confederation for Physical Therapy-Asia Western Pacific Region Conference, 2013 (Oral Presentation)
 15. **Cheng CH***, Cheng HYK, Tsai SI, Chiang WS, Lin YC, Changes of postural control after prolonged standing on sloped surface in young healthy adults, The 6th World Congress on Bioengineering, 2013 (Oral Presentation) (Corresponding author)
 16. Yen LW, Su HT, Cheng HYK, **Cheng CH***, Effect of neck flexor fatigue on

- standing balance following perturbations in young healthy adults, The 6th World Congress on Bioengineering, 2013 (Oral Presentation) (Corresponding author)
17. Su HT, Yen LW, Cheng HYK, **Cheng CH***, Standing balance following internal/external perturbation in young healthy adults, Asia-Western Pacific Regional Congress of the World Confederation for Physical Therapy, 2013 (Oral Presentation) (Corresponding author)
 18. Cheng HYK, Ju YY, Chen CL, Wong AMK, **Cheng CH**, Effects of an eight-week repetitive passive knee movement intervention on lower extremity muscle tone and function in children with cerebral palsy, The 6th Conference on Rehabilitation Engineering and Assistive Technology Society of Korea, 2012 (Oral Presentation)
 19. **Cheng CH**, Lin YH, Ng HH, Cheng HYK, Chen CPC, Chang YL, Co-contraction of cervical muscles is altered in patients with chronic neck pain during voluntary neck movements, International Symposium on Quality of Live Technology, 2012
 20. Tsai SC*, Liu WY, Wang CM, Wong AMK, Lein R, **Cheng CH**, Chen FJ, Intra-rater reliability of prechtl's method on the qualitative assessment of general movements based on the video recordings on taiwanese infants, Asia-Oceanian Conference of Physical and Rehabilitation Medicine, 2012
 21. Yen LW, Lin JL, **Cheng CH***, Posture control following neck flexor muscle fatigue in young healthy adults, Asia-Oceanian Conference of Physical Rehabilitation and Medicine, 2012 (Oral Presentation) (Corresponding author)
 22. Lin JL, Yen LW, **Cheng CH***, The comparison of whole-body muscle fatigue between the anaerobic and aerobic specific tests in badminton players, Asia-Oceanian Conference of Physical Rehabilitation and Medicine, 2012 (Oral Presentation) (Corresponding author)
 23. **Cheng CH**, Wang JL, Chen CPC, Chang YL, Comparisons of the in vivo flexibility characteristics of cervical spine in young subjects with/without chronic neck pain. Annual Meeting of Orthopaedic Research Society, 2012
 24. **Cheng CH**, Lin YH, Ng HH, Chang YL, In vivo flexibility characteristics of cervical spine in young healthy subjects during sagittal And Coronal neck movements. International Society of Biomechanics Congress, 2011 (Oral Presentation)
 25. **Cheng CH**, Wang JL, Chen CPC, Chang YL, Estimation of the deep muscle activation and spinal load of human cervical spine during neck movements. Annual Meeting of Orthopaedic Research Society, 2011

26. **Cheng CH**, Chu YH, Tang PF, Performance of multi-directional volitional stepping in healthy young adults and elderly. World Physical Therapy, 2011
27. Liu WY, Liao CF, Lien HY, Lin YH, Wong AMK, **Cheng CH**, Effect of modified commercially available visual center of pressure feedback training on postural adjustments in healthy adults, World Physical Therapy, 2011
28. Lin JL, **Cheng CH***, Chen FJ, The test-retest reliability of perceived neck muscle fatigue in different test directions in healthy adults. The 62th Scientific Conference of Physical Therapy Association of the Republic of China, March, 2011 (Corresponding author)
29. Cai FT, Hung YC, Jhong YJ, Liao CF, Liu WY, **Cheng CH**, Effects of intensive reach forward practices while standing on reach movement in healthy young adults: a pilot study. International Symposium on the 3D Analysis of Human Movement, 2010
30. **Cheng CH**, Chen PJ, Kuo, YW, Wang JL, Effects of disc degeneration and muscle dysfunction on the cervical spine stability – from in vitro study using porcine model. Asia-Oceanian Conference of Physical and Rehabilitation Medicine, 2010 (Oral Presentation)
31. **Cheng CH**, Chen HM, Lee CS, Influence of computer mouse weights and moving speeds on wrist motion and forearm/shoulder muscle activity. Annual Meeting of Orthopaedic Research Society, 2010
32. **Cheng CH**, Lin KH, Lin JJ, Wang JL, Effect of movement speed on cervical muscle activation pattern in healthy adults: voluntary response index analysis. International society of Biomechanics Congress, 2007 (Oral Presentation)
33. **Cheng CH**, Chen TY, Kuo YW, Wang JL, The comparison of neutral zone, range of motion and resultant force and moment among different cervical muscle dysfunctions. International society of Biomechanics Congress, 2007
34. **Cheng CH**, Lin KH, Wang JL, The effect of head movement speeds on the cervical muscle co-contraction during sagittal and coronal motions. Annual Conference of the Taiwanese Society of Biomechanics, 2006 (**Oral Presentation Award**)
35. **Cheng CH**, Lin KH, Chang LW, Determination of foot-plate spacing for swivel walkers by an optimization method. Asian Pacific of Biomechanics Conference, 2005 (Oral Presentation)
36. **Cheng CH**, Chiou HC, Wang JL, The load transmission and energy absorption of tibia during impact load. International Conference on Biomechanics combined with Annual Scientific Meeting of Taiwanese Society of Biomechanics, 2001
37. **Cheng CH**, Chang LW, A system model of fcs-assisted swivel gait orthosis

system for paraplegics. Biomedical Engineering Conference, 2001