1. 解釋名詞 (每題 5 分,共 40 分)

    (1) Open-loop system

    (2) Convergence insufficiency

    (3) Constraint-induced movement therapy

    (4) Alternating attention

    (5) Backward chaining

    (6) Boutonniere deformity

    (7) Superficial partial thickness burn

    (8) Kinematics

    在 Trombly, C. A. 的定義中
2. 試說明何謂 occupation-as-ends,occupation-as-means,並舉例。 (10 分)

3. 試說明何謂 declarative memory,procedural memory,並舉例。(10 分)

4. 試比較 Bobath 的 Neurodevelopmental treatment (NDT), Carr and Shepherd 的 Motor relearning program, 以及 Occupational therapy task-oriented approach 三者的理論基礎、治療原則及手法的異同。(20 分)

5. 試就下列兩篇文章之摘要,回答下列問題。(每題 5 分,共 20 分)

    (1) 研究中的治療模式較屬於 bottom-up 或是 top-down approach, 原因?

    (2) 第一篇文章中的 conclusion 的第一句說 "causality cannot be inferred",試解釋為何作者做此陳述。

    (3) 第二篇文章(phase II study)較第一篇文章(phase I study)有哪些進一步的做法及提供哪些進一步的資訊?

    (4) 兩篇文章的 results 部份有出現 p 值和 r 值,試說明兩者的意義和關係。

Study 1

Trombly, C. A., Radomski, M. V., & Davis, E. S. (1998). Achievement of self-identified goals by adults with traumatic brain injury: Phase I. American Journal of Occupational Therapy, 52, 810-818.

Objective. *This study sought to determine whether persons with traumatic brain injury who received outpatient occupational therapy services achieved self-identified goals related to tasks of daily life.*

Method. *Sixteen participants completed the study. Occupational therapists used their usual treatment procedures to restore independence in home and community occupational functioning. The Canadian Occupational Performance Measure identified the five most important problems that interfered with independence in the roles the participant valued as well as the participant's perception of performance ability and satisfaction with performance. Goal Attainment Scaling documented achievement of the five self-identified goals. The Independent Living Skills Evaluation (ILSE) and the Reintegration to Normal Living Scale (RNL) measured changes in overall instrumental activities of daily living and community reintegration.*

Results. *The participants significantly achieved (p < .001) their goals from admission to discharge, rated themselves as performing significantly better (p < .001), and were significantly more satisfied (p = .001) with performance after treatment than before. Additionally, they improved significantly on the ILSE (p < .001) and the RNL (p < .001) from admission to discharge. There were no significant changes in performance from discharge to follow-up on any of the scales.*

Conclusion. *Although causality cannot be inferred, it can be concluded that participants attending outpatient occupational therapy significantly improved, and improvements were sustained after discharge, but no further improvement occurred spontaneously.*

Study 2

Trombly, C. A., Radomski, M. V., Trexel, C., & Burnett-Smith, S. E. (2002). Occupational therapy and achievement of self-identified goals by adults with acquired brain injury: Phase II. American Journal of Occupational Therapy, 56, 489-498.

OBJECTIVE. The purpose of this study was to investigate the association between participation in goal-specific outpatient occupational therapy and improvement in self-identified goals in adults with acquired brain injury.

METHOD. Thirty-one persons with traumatic brain injury of mixed chronicity participated at three sites located in different regions of the United States. Using a repeated-measures design, therapy that usually was offered at each site to achieve specific goals was followed by a no-treatment period. Participants completed the Canadian Occupational Performance Measure Performance subscale (COPM-P) and Satisfaction subscale (COPM-S), and the Community Integration Questionnaire (CIQ) at admission, discharge, and 1 to 18 weeks after discharge. Goal attainment scales were developed at admission and scored at discharge; the differences for each site were tested, using dependent t tests. Gains for the treatment period (admission to discharge) in COPM subscales and the CIQ were compared with gains during the no-treatment period (discharge to follow-up) for each site, using dependent t tests. The results were synthesized meta-analytically across the sites.

RESULTS. The participants identified a total of 149 goals, 81% of which were achieved. Goal attainment T scores improved significantly ($Z = 7.52$, $p < .001$), and the combined effect size was large ($r = .94$). The COPM-P ($Z = 4.13$, $p < .001$) and COPM-S ($Z = 4.25$, $p < .001$) showed significantly greater gains during the treatment (average 15.3 weeks) versus the no-treatment (average 9.9 weeks) period. Effect size estimates were large: .71 and .76, respectively. Gain scores of the CIQ did not differ significantly ($Z = .75$, $p = .22$, $r = .29$) between periods.

CONCLUSION. Participation in goal-specific outpatient occupational therapy that focused on teaching compensatory strategies was strongly associated with achievement of self-identified goals and reduction of disability in adults with mild to moderate brain injury.