

מוח והתנהגות: תהליכיים קוגניטיביים והשפעתם על התפקוד

מסלול מוסמך, מס'קורס: 320.4164

סמינר ב', תשפ"ב 2022

מרצה: ד"ר רחל קיזוני rkizony@univ.haifa.ac.il

משך הקורס: 2 ש"ס במהלך סמסטר ב'

יום ד' בין השעות 14.00-16.00

מטרות הקורס ותכנים:

- להעמק את הידע בתחום הקוגניטיבי - מטה קוגניטיבי בדגש על **קוגניציה תפקודית**; להכיר מודלים, גישות ושיטות טיפול מגוונות להשתרבויות עם אוכלוסיות שונות לאורך רצף החיים והבדיקות הקשורות לכוחת הקוגניטיבית של האדם לתפקוד בחיי היום יום. בנוסף, לגשר בין התאוריה לקליניקה.
- להעמק בהבנת הקשר בין תפקוד המוח לעיסוק האדם.
- הרחבת הידע התאורטי והמעשי בנוגע לאבחונים קוגניטיביים – תפקודים וגישור בין ממצאים האבחון לטיפול.

חשיבות הסטודנטית וציון הקורס:

- השתתפות פעילה בשיעורים הכוללת (20%);
 - הבאת תיאור מקרה לכיתה לצורך דיון בקבוצות עבודה קטנות במהלך השיעורים בהתאם לחומר שיימלד (בכל קבוצה יבחר תיאור מקרה אחד).
 - התנסות באבחן בклиיניקה/מרחוק ודין בתובנות בכיתה.
ראו פירוט למטה.
- הצגת תיאור המקרה המלא (בקבוצות העבודה) בסוף הסמסטר- הנחיות מפורטות ימסרו בהמשך- 30%.
- עבודה מסכמת (הגשה ב 1.7.22) – עד 3 עמודים; סיכום של פעילויות טיפוליות מבוססות ראיות בהתאם לתיאור המקרה שהוצג; הנחיות מפורטות ימסרו בהמשך – 50%.

"תכנו שינויים בסילבו עקב אילוצים בלתי צפויים כגון סגר.

תיאור מקרה - להביא לכיתה בתאריך 16.3.22.

על התיאור לכלול:

מידע על האדם; פרטים שלබניטים להבנת מצבו/ה ללא זיהוי.
מידע על סיבת הפניה לריפוי בעיסוק או צורך בהפניה לריפוי בעיסוק.
דילמות שעלו בטיפול/הערכה/קריאת המידע הרפואי/ היכרות עם האדם ועוד.

התנסות באבחן בклиיניקה או מרחוק ודין בתובנות בכיתה ב 6.4.22

יש להתנסות בהעברת אחד האבחונים שהוזכרו בשיעורים או כל אבחן אחר בתיאום עם המרצה, עם אדם בклиיניקה או בהערכה מרחוק (לא בהכרח מטופל).

להcin סיכון בעמוד אחד לדין בכיתה:

- רצינן לבחירת האבחן לאדם הספציפי (יכול להיות גם כמייצג אוכלוסייה קלינית פוטנציאלית; לדוגמה אדם שלא ליקות כמייצג אפשרות להשתמש באבחן לאנשים עם ליקות).
- מסקנות מההעברת האבחן; מצב קוגניטיבי-תפקודי של האדם, מטרת טיפול שיכולה להיגזר מממצאי האבחן, מגבלות האבחן, יתרונות האבחן (שני האחרונים בתחום זה לאדם הספציפי).
- מקורות (של האבחן, מאמר במידה ורלבנטי).

ביבליוגרפיה לדוגמה, לעזר בהכנות המטלות (כולל ספרים)

- Adamit, T., Shames, J., & Rand, D. (2021). Effectiveness of the Functional and Cognitive Occupational Therapy (FaCoT) Intervention for Improving Daily Functioning and Participation of Individuals with Mild Stroke: A Randomized Controlled Trial. *International Journal of Environmental Research and Public Health*, 18(15), 7988.
- Ali, J. I., Viczko, J., & Smart, C. M. (2020). Efficacy of neurofeedback interventions for cognitive rehabilitation following brain injury: Systematic review and recommendations for future research. *Journal of the International Neuropsychological Society*, 26(1), 31-46.
- Bayley, M. T., Tate, R., Douglas, J. M., Turkstra, L. S., Ponsford, J., Stergiou-Kita, M., ... & Bragge, P. (2014). INCOG guidelines for cognitive rehabilitation following traumatic brain injury: methods and overview. *The Journal of head trauma rehabilitation*, 29(4), 290-306.
- Bogdanova, Y., Yee, M. K., Ho, V. T., & Cicerone, K. D. (2016). Computerized cognitive rehabilitation of attention and executive function in acquired brain injury: A systematic review. *The Journal of head trauma rehabilitation*, 31(6), 419-433
- Carson, V., Hunter, S., Kuzik, N., Wiebe, S. A., Spence, J. C., Friedman, A., ... & Hinkley, T. (2016). Systematic review of physical activity and cognitive development in early childhood. *Journal of science and medicine in sport*, 19(7), 573-578.
- Chung CSY, Pollock A, Campbell T, Durward BR, Hagen S. (2013). Cognitive rehabilitation for executive dysfunction in adults with stroke or other adult non-progressive acquired brain damage. *Cochrane Database of Systematic Reviews*, 4. Art. No.: CD008391. DOI: 10.1002/14651858.CD008391.pub2.
- Cicerone, K. D., Goldin, Y., Ganci, K., Rosenbaum, A., Wethe, J. V., Langenbahn, D. M., ... & Trexler, L. (2019). Evidence-based cognitive rehabilitation: systematic review of the literature from 2009 through 2014. *Archives of physical medicine and rehabilitation*, 100(8), 1515-1533.
- Clark-Wilson, J., Giles, G. M., & Baxter, D. M. (2014). Revisiting the neurofunctional approach: Conceptualizing the core components for the rehabilitation of everyday living skills. *Brain injury*, 28(13-14), 1646-1656.
- Clerc, J., Leclercq, M., Paik, J., & Miller, P. H. (2021). Cognitive flexibility and strategy training allow young children to overcome transfer-Utilization Deficiencies. *Cognitive Development*, 57, 100997.
- Dawson, D., & Marcotte, M.D. (2017) Special issue on ecological validity and cognitive assessment, *Neuropsychological Rehabilitation*, 27:5, 599-602, DOI: 10.1080/09602011.2017.1313379

Faculty of Social Welfare & Health Sciences
Occupational Therapy Department, joint program – Haifa University and Technion

- Dawson, D., McEwen, S.E.,& Polatajko, H.J. Eds. (2017). *Cognitive Orientation to Daily Occupational Performance in Occupational Therapy : Using the CO-OP Approach (TM) to Enable Participation Across the Lifespan*. Maryland: AOTA.
- Dawson, D., Richardson, J., Troyer, A., Binns, M., Clark, A., Polatajko, H., ... & Bar, Y. (2014). An occupation-based strategy training approach to managing age-related executive changes: a pilot randomized controlled trial. *Clinical rehabilitation*, 28(2), 118-127.
- Dawson, P., & Guare, R. (2010). *Executive skills in children and adolescents: A practical guide to assessment and intervention*. Guilford Press.
- Factor, P. I., Rosen, P. J., & Reyes, R. A. (2016). The relation of poor emotional awareness and externalizing behavior among children with ADHD .*Journal of attention disorders* 20(2), 168-177
- Fogel, Y., Rosenblum, S., & Josman, N. (2021). Functional Individualized Therapy for Teenagers With Executive Deficits: A Pilot Study. *Annals of International Occupational Therapy*, 4(3), e126-e134.
- Frisch, C., Tirosh, E., & Rosenblum, S. (2019). Parental Occupation Executive Training (POET): An Efficient Innovative Intervention for Young Children with Attention Deficit Hyperactive Disorder. *Physical & occupational therapy in pediatrics*, 1-15.
- Frisch, C., Tirosh, E., & Rosenblum, S. (2020). Parental occupation executive training (POET): An efficient innovative intervention for young children with attention deficit hyperactive disorder. *Physical & occupational therapy in pediatrics*, 40(1), 47-61.
- Gillen, G. (2009). Cognitive and Perceptual Rehabilitation: Optimizing Function. St. Louis, Elsevier.
- Galetto, V., & Sacco, K. (2017). Neuroplastic Changes Induced by Cognitive Rehabilitation in Traumatic Brain Injury: A Review. *Neurorehabilitation and Neural Repair*, 31(9), 800-813.
- Givon Schaham, N., Vitek, H., Donda, N., Elbo Golan, I., Buckman, Z., & Rand, D. (2020). The Development and Feasibility of TECH: Tablet Enhancement of Cognition and Health, a Novel Cognitive Intervention for People with Mild Cognitive Impairment. *Games for Health Journal*, 9(5), 346-352.
- Giles, G. M., Edwards, D. F., Baum, C., Furniss, J., Skidmore, E., Wolf, T., & Leland, N. E. (2020). Making functional cognition a professional priority. *American Journal of Occupational Therapy*, 74(1), 7401090010p1-7401090010p6.
- Goldstein, S., Naglieri, J. A., Princiotta, D., & Otero, T. M. (2014). Introduction: a history of executive functioning as a theoretical and clinical construct. In *Handbook of executive functioning* (pp. 3-12). Springer New York.
- Goverover, Y., & DeLuca, J. (2018). Assessing everyday life functional activity using actual reality in persons with MS . *Rehabilitation Psychology* 63 (2), 276.

Faculty of Social Welfare & Health Sciences
Occupational Therapy Department, joint program – Haifa University and Technion

- Hahn-Markowitz, J., Berger, I., Manor, I., & Maeir, A. (2016). Efficacy of Cognitive-Functional (Cog-Fun) Occupational Therapy Intervention Among Children With ADHD: An RCT. *Journal of attention disorders*, 1087054716666955.
- Hahn-Markowitz, J., Berger, I., Manor, I., & Maeir, A. (2018). Cognitive-functional (cog-fun) dyadic intervention for children with ADHD and their parents: impact on parenting self-efficacy. *Physical & occupational therapy in pediatrics*, 38(4), 444-456.
- Hahn-Markowitz, J., Berger, I., Manor, I., & Maeir, A. (2020). Efficacy of cognitive-functional (Cog-Fun) occupational therapy intervention among children with ADHD: An RCT. *Journal of attention disorders*, 24(5), 655-666.
- Houldin, A., McEwen, S. E., Howell, M. W., & Polatajko, H. J. (2018). The cognitive orientation to daily occupational performance approach and transfer: a scoping review. *OTJR: occupation, participation and health*, 38(3), 157-172.
- Jaber, A. F., Hartwell, J., & Radel, J. D. (2019). Interventions to address the needs of adults with postconcussion syndrome: A systematic review. *American Journal of Occupational Therapy*, 73, 7301205020. <https://doi.org/10.5014/ajot.2019.028993>.
- Josman, N., & Meyer, S. (2019). Conceptualization and use of executive functions in pediatrics: a scoping review of occupational therapy literature. *Australian occupational therapy journal*, 66(1), 77-90.
- Kafri, M., Weiss, P. L., Zeilig, G., Bondi, M., Baum-Cohen, I., & Kizony, R. (2021). Performance in complex life situations: effects of age, cognition, and walking speed in virtual versus real life environments. *Journal of NeuroEngineering and Rehabilitation*, 18(1), 1-9.
- Kaizerman-Dinerman, A., Roe, D., & Josman, N. (2018). An efficacy study of a metacognitive group intervention for people with schizophrenia. *Psychiatry research*, 270, 1150-1156.
- Katz, N. & Toglia, J., (Eds). (2018). *Cognition, occupation and participation across the life span: models neuroscience, neurorehabilitation and for intervention in occupational therapy*. 4th edition. Bethesda MD: AOTA Press.
- Kennedy, Greg, Roy J. Hardman, Helen Macpherson, Andrew B. Scholey, and Andrew Pipingas. "How does exercise reduce the rate of age-associated cognitive decline? A review of potential mechanisms." *Journal of Alzheimer's Disease* 55, no. 1 (2017): 1-18.
- Kizony, R., Tau, S., Bar, O., & Yeger, B. E. (2014). Comparing memory and meta-memory abilities between children with acquired brain injury and healthy peers. *Research in developmental disabilities*, 35(7), 1666-1673.
- Krasny-Pacini, A., Chevignard, M., & Evans, J. (2014). Goal Management Training for rehabilitation of executive functions: a systematic review of effectiveness in patients with acquired brain injury. *Disability and Rehabilitation*, 36(2), 105-116.

Faculty of Social Welfare & Health Sciences
Occupational Therapy Department, joint program – Haifa University and Technion

- Krieger, V., & Amador-Campos, J. A. (2018). Assessment of executive function in ADHD adolescents: contribution of performance tests and rating scales. *Child Neuropsychology, 24*(8), 1063-1087.
- Levanon-Erez, N., Kampf-Sherf, O., & Maeir, A. (2019). Occupational therapy metacognitive intervention for adolescents with ADHD: Teen Cognitive-Functional (Cog-Fun) feasibility study. *British Journal of Occupational Therapy, 0308022619860978*.
- Lidz, C. S., & Gindis, B. (2003). Dynamic assessment of the evolving cognitive functions in children. Vygotsky's educational theory in cultural context. In C. Lidz & J.G Elliot (Eds.), *Dynamic Assessment: Prevailing models and applications* (pp. 99-116). NY: Elsevier Science.
- Lyons, K. E., & Zelazo, P. D. (2011). Monitoring, metacognition, and executive function: Elucidating the role of self-reflection in the development of self-regulation. *Advances in child development and behavior, 40*, 379-412.
- Maeir, A., Fisher, O., Bar-Ilan, R. T., Boas, N., Berger, I., & Landau, Y. E. (2014). Effectiveness of Cognitive–Functional (Cog–Fun) occupational therapy intervention for young children with attention deficit hyperactivity disorder: A controlled study. *American Journal of Occupational Therapy, 68*(3), 260-267.
- Mowszowski, L., Lampit, A., Walton, C. C., & Naismith, S. L. (2016). Strategy-based cognitive training for improving executive functions in older adults: a systematic review. *Neuropsychology review, 26*(3), 252-270.
- Morgan, J. E., & Ricker, J. H. (Eds.). (2016). *Textbook of clinical neuropsychology*. In JE Morgan & JH Ricker (Eds.), *Textbook of clinical neuropsychology* (pp. 38–57). New York , NY : Taylor & Francis.
- Nagelkop, N. D., Rosselló, M., Aranguren, I., Lado, V., Ron, M., & Toglia, J. (2021). Using Multicontext Approach to Improve Instrumental Activities of Daily Living Performance after a Stroke: A Case Report. *Occupational Therapy In Health Care, 1*-19.
- Nir-Hadad, S. Y., Weiss, P. L., Waizman, A., Schwartz, N., & Kizony, R. (2017). A virtual shopping task for the assessment of executive functions: Validity for people with stroke. *Neuropsychological rehabilitation, 27*(5), 808-833.
- Pfeiffer, B., Clark, G. F., & Arbesman, M. (2018). Effectiveness of cognitive and occupation-based interventions for children with challenges in sensory processing and integration: A systematic review. *American Journal of Occupational Therapy, 72*(1), 7201190020p1-7201190020p9.
- Polatajko, H. J., McEwen, S. E., Ryan, J. D., & Baum, C. M. (2012). Pilot randomized controlled trial investigating cognitive strategy use to improve goal performance after stroke. *American Journal of Occupational Therapy, 66*(1), 104-109.

Faculty of Social Welfare & Health Sciences
Occupational Therapy Department, joint program – Haifa University and Technion

- Radomski, M. V., Anheluk, M., Bartzen, M. P., & Zola, J. (2016). Effectiveness of interventions to address cognitive impairments and improve occupational performance after traumatic brain injury: a systematic review. *American Journal of Occupational Therapy*, 70(3), 7003180050p1-7003180050p9.
- Rosenberg, L., Maeir, A., Yochman, A., Dahan, I., & Hirsch, I. (2015). Effectiveness of a Cognitive–Functional Group Intervention Among Preschoolers With Attention Deficit Hyperactivity Disorder: A Pilot Study. *American Journal of Occupational Therapy*, 69(3), 6903220040p1-6903220040p8.
- Schejter-Margalit, T., Kizony, R., Shirvan, J., Cedarbaum, J. M., Bregman, N., Thaler, A., ... & Mirelman, A. (2021). Quantitative digital clock drawing test as a sensitive tool to detect subtle cognitive impairments in early stage Parkinson's disease. *Parkinsonism & Related Disorders*.
- Shema-Shiratzky, S., Brozgol, M., Cornejo-Thumm, P., Geva-Dayan, K., Rotstein, M., Leitner, Y., ... & Mirelman, A. (2019). Virtual reality training to enhance behavior and cognitive function among children with attention-deficit/hyperactivity disorder: brief report. *Developmental neurorehabilitation*, 22(6), 431-436.
- Skidmore, E. R., Butters, M., Whyte, E., Grattan, E., Shen, J., & Terhorst, L. (2017). Guided training relative to direct skill training for individuals with cognitive impairments after stroke: a pilot randomized trial. *Archives of physical medicine and rehabilitation*, 98(4), 673-680.
- Sohlberg, M. M. & Mateer, C. A. (2001). *Introduction to Cognitive Rehabilitation: Theory and Practice*. NY: Guilford.
- Sohlberg, M. M., & Turkstra, L. S. (2011). *Optimizing cognitive rehabilitation: Effective instructional methods*. Guilford Press.
- Thornton, A., Licari, M., Reid, S., Armstrong, J., Fallows, R., & Elliott, C. (2016). Cognitive orientation to (daily) occupational performance intervention leads to improvements in impairments, activity and participation in children with Developmental Coordination Disorder. *Disability and Rehabilitation*, 38(10), 979-986.
- Toglia, J. & Foster E. (2021). The Multicontext Approach to Cognitive Rehabilitation: A Metacognitive Strategy Intervention to Optimize Functional Cognition, Columbus, OH:Gatekeeper Press.
- Toglia, J. & Kirk, U. (2000). Understanding awareness deficits following brain injury. *NeuroRehabilitation*, 15, 57-70.
- Toglia, J., Johnston, M. V., Goverover, Y., & Dain, B. (2010). A multicontext approach to promoting transfer of strategy use and self regulation after brain injury: An exploratory study. *Brain Injury*, 24(4), 664-677.
- Toglia, J. P., Rodger, S. A., & Polatajko, H. J. (2012). Anatomy of cognitive strategies: A therapist's primer for enabling occupational performance. *Canadian Journal of Occupational*

Faculty of Social Welfare & Health Sciences
Occupational Therapy Department, joint program – Haifa University and Technion

Therapy, 79(4), 225-236.

- Tornås, S., Løvstad, M., Solbakk, A. K., Evans, J., Endestad, T., Hol, P. K., ... & Stubberud, J. (2016). Rehabilitation of executive functions in patients with chronic acquired brain injury with goal management training, external cuing, and emotional regulation: a randomized controlled trial. *Journal of the International Neuropsychological Society*, 22(4), 436-452.
- Watters, K., Marks, T. S., Edwards, D. F., Skidmore, E. R., & Giles, G. M. (2021). A Framework for Addressing Clients' Functional Cognitive Deficits After COVID-19. *American Journal of Occupational Therapy*, 75(Supplement_1), 7511347010p1-7511347010p7.
- Wolf, T. J., Edwards, D., & Giles, G. M. (Eds.). (2019). *Functional cognition and occupational therapy: A practical approach to treating individuals with cognitive loss*. AOTA Press.
- Ylvisaker, M. (1998). *Traumatic Brain Injury Rehabilitation* (2nd Ed.). Boston: Butterworth-Heinemann.