University of Birmingham

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Lecturer

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Qualifications

- BA (Tel Aviv)
- PhD (Birmingham)

Biography

I graduated from Tel Aviv University, Israel, doing both psychology and computer sciences. I later moved on to develop a new computerised assessment and training batteries for children and adults with ADHD (together with Professor Yehoshua Tsal and Dr Lilach Shalev) following which I arrived at Birmingham to study for a Ph.D. with Professor Glyn Humphreys. After completion of my Ph.D. I took a couple of post-doc positions (ESRC, MRC) before taking up a lectureship position in 2010.

Teaching

Cognitive Psychology A (Module leader)

Research

I am generally interested in the neuroanatomy of attentional selection, and how attention complements perception through the interaction of top-down and bottom-up processes. One such form of attentional selection of particular interest is salience-based selection (see Mevorach, Humphreys and Shalev, 2006, Nature Neuroscience).

In investigating these mechanisms I combine a variety of experimental techniques including neuropsychological studies, trans-cranial magnetic stimulation (TMS), fMRI and ERP, including their simultaneous use within the same study.

My interest in attention and perception also extends to cases where they might be altered: such as in patients with brain lesion, neurodevelopmental disorders (such as ADHD or Autism) and normal ageing. By better understanding the circuitry of top-down attentional selection in health I aim to elucidate attentional functioning in these atypical scenarios so that the difficulties and also the way they might be ameliorated can be unveiled.

Publications

Mevorach, C., Hodsoll, J., Allen H. A., Shalev, L., Humphreys, G. W. (2010). Ignoring the Elephant in the Room: A Neural Circuit to Down-regulate Salience. Journal of Neuroscience, 30, 6072-6079.

Riddoch, M.J., Chechlacz, M., Mevorach, C., Mavritsaki, R., Allen, H.,and Humphreys, G.W. (2010). The neural mechanisms of visual selection: the viewfrom neuropsychology. Annals of the New York Academy of Sciences, 1191,156–181.

Mevorach, C., Humphreys, G. W. & Shalev, L. (2009). Reflexive andpreparatory selection and suppression of saliency in the right and leftposterior parietal cortex. Journal of Cognitive Neuroscience, 21:6, 1204-1214.

Hodsoll, J., Mevorach, C.,& Humphreys, G. W. (In press). Driven to less distraction: rTMS of theright parietal cortex reduces attentional capture in visual search. CerebralCortex.

Mevorach C, Shalev L, Allen HA, Humphreys GW. (In press). The LeftIntrapariatel Sulcus Modulates the Selection of Low Salient Stimuli. Journal ofCognitive Neuroscience.

Shalev, L., Mevorach, C. & Humphreys, G.W. (2008). Letter position codingin attentional dyslexia. Neuropsychologia, 46(8), 2145-2151.

Shalev, L., Mevorach, C., & Humphreys, G. W. (2007) Local capture inBalint's syndrome: Effects of grouping and item familiarity. CognitiveNeuropsychology, 24, 115-127.

Shalev, L., Tsal Y., & Mevorach C. (2007) Computerized progressiveattentional training (CPAT) program: Effective direct intervention for childrenwith ADHD. Child Neuropsychology, 13, 382-388.

Mevorach, C., Humphreys, G. W., & Shalev, L. (2006). Opposite biases in salience-basedselection for the left and right posterior parietal cortex. NatureNeuroscience, 9, 740-742.

Mevorach, C., Humphreys, G. W., & Shalev, L. (2006). Effects of saliency,not global dominance, in patients with left parietal damage. Neuropsychologia,44, 307-319.

Shalev L., Humphreys, G. W., & Mevorach C. (2005). Global processing ofcompound letters in a patient with Balint's syndrome. CognitiveNeuropsychology, 22, 737-751.

Tsal, Y., Shalev, L., & Mevorach, C. (2005). The diversity of attentiondeficits in Attention Deficit Hyperactivity Disorder: The prevalence of fourcognitive factors in ADHD vs. Controls. Journal of Learning Disabilities, 38,142-157.

Mevorach, C., Humphreys, G. W., & Shalev, L. (2005). Attending to localform while ignoring global aspects depends on handedness: Evidence from TMS.Nature Neuroscience, 8, 276-277.

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