

UNIVERSITY OF HERTFORDSHIRE

Psychology and Sport Sciences Research Seminars 2017-2018

Day & Time: Thursdays 16.00-17.30 (except talks on **22 Feb and 12 Apr**)

Locations: 2H255 (except talks on **22 Feb and 12 Apr**)

SEMESTER A

Date	Speaker / Topic	Room
19.10.17	Elizabeth Pike, University of Hertfordshire <i>Active ageing as a public health imperative: considering models of deficit, heroic and authentic ageing through sport</i>	2H255
26.10.17	Benjamin Schultz & Sonja Kotz, Maastricht University <i>Make 'em dance: Using acoustic salience to non-invasively stimulate the motor system</i>	2H255
02.11.17	Naz Derakhshan, Birkbeck, University of London <i>Neurocognitive pathways to resilience in anxiety and depression</i>	2H255
09.11.17	David Carey, Bangor University <i>Handedness and cerebral asymmetry: A new look</i>	2H255
16.11.17	Ernest Simons, University of Hertfordshire <i>A meta-analysis and experimental study examining hippocampal structure/function in people with depressive/dysphoric traits</i> Diamantis Toutounzidis, University of Hertfordshire <i>Childhood traumatic events and schizotypal personality traits</i>	2H255
23.11.17	<i>No seminar</i>	2H255
30.11.17	Mel Slater, UCL, University of Barcelona <i>Therapeutic and social applications of virtual embodiment</i>	2H255
07.12.17	Peter Harris, University of Sussex <i>Self-affirmation and the response to health-risk information</i>	2H255

SEMESTER B

Date	Speaker / Topic	Room
15.02.18	<i>No Seminar</i>	2H255
22.02.18 18:30- 20:00	James Davies, Roehampton University <i>UH - BPS London and Home Counties Networking event</i> <i>The making of mental disorder: the disturbing truth about the construction of the DSM</i>	A166

01.03.18	Jonathan Katz, Performance in Mind (postponed) <i>Supporting the person, not just the performance</i>	2H255
08.03.18	Jane Garrison, Cambridge University <i>Knowing what is real: reality monitoring and hallucinations</i>	2H255
15.03.18	Marc Jones, Staffordshire University <i>The Challenge of performance, health and well-being</i>	2H255
22.03.18	Kenny Coventry, University of East Anglia <i>Where are my keys? Describing and remembering object location</i>	2H255
12.04.18 18:30- 20:00	Simon McCarthy-Jones, Trinity College, Dublin <i>UH - BPS London and Home Counties Networking event</i> <i>'Hearing voices': what do we know, what don't we know?</i>	A154
19.04.18	Ian Rivers, Strathclyde University <i>Utilising research to tackle bullying and discrimination in sport: Examining studies of homophobia</i>	2H255
26.04.18	Laurence Barsalou, University of Glasgow <i>Situated conceptualization</i>	2H255
03.05.18	Garry Tew, Northumbria University <i>Intermittent claudication - a real pain in the ... leg. Don't worry, just walk it off!</i>	2H255

Speaker	Abstract
Elizabeth Pike <i>University of Hertfordshire</i> 19.10.17	<p><i>“Active ageing as a public health imperative: considering models of deficit, heroic and authentic ageing through sport”</i></p> <p>This presentation will examine the role of physical activity in later life by providing stories of ageing drawing on policy documents, public health messages and media reports about the benefits of physical activity for older people. I will give consideration to the ways in which such texts in neoliberal societies often appear to unquestioningly accept the need for older members of the population to take individual responsibility for engaging in ‘active ageing’ in order to ‘age well’, such that this has become a new framework for, and norm of, ageing. The presentation will question the extent to which narratives of ageing may present opportunities for older people to resist age-based marginalisation and experience ageing as a positive process, in ways that might inform future policy and practice in making more appropriate provisions for older people’s physical activity. In particular, I will review evidence which suggests that older people seek social and inclusive activities that emphasise health, fitness, and cooperation, rather than those necessarily featuring competition and physical force, presenting research evidence from studies of older people who are increasingly engaging in outdoor adventurous sporting activities.</p>
Benjamin Schultz, <i>Maastricht University</i>	<p><i>Make ‘em dance: Using acoustic salience to non-invasively stimulate the motor system</i></p> <p>When listening to music, humans spontaneously synchronize their movements with different aspects of the sound, for example, dancing. We propose that such movements are a direct result of specific acoustic features that activate motor responses in the</p>

<p>26.10.17</p>	<p>peripheral nervous system. To test this hypothesis, participants ($N = 42$) remained still and listened to several musical excerpts while electromyography (EMG) was recorded on the hand and arm. Participants then provided continuous salience ratings using a slider to assess how much certain aspects of the sound stood out relative to other sounds with no instruction regarding which acoustic feature(s) to use for their judgments. Acoustic features were extracted from the excerpts, specifically, intensity (perceived as loudness), inharmonicity (pitch dissonance), and timbre (spectral centroid). Time series analyses were conducted for each participant and excerpt to assess the relationship between EMG activity, salience ratings, and acoustic features. Moderate cross-correlations were evident between EMG activity and intensity, inharmonicity, and spectral centroid. Intensity and spectral centroid demonstrated moderate cross-correlation with salience ratings. Overall, results suggest that intensity and spectral centroid are acoustic features that simultaneously influence motor activity and salience perception. Inharmonicity also evokes a motor response but is not perceived as salient. Results are discussed within a dynamical systems framework that suggests continuous sound streams can shape our movements based on several different rhythmic features that are not necessarily periodic, thus aiding sensorimotor synchronization. Findings have implications for motor and speech rehabilitation techniques that require listening and acting upon auditory stimuli (e.g., rhythmic auditory stimulation) and could facilitate movement therapy for persons with Parkinson's disease.</p>
<p>Naz Derakhshan, <i>Birkbeck,</i> <i>University of London</i></p> <p>02.11.17</p>	<p><i>“Neurocognitive pathways to resilience in anxiety and depression”</i></p> <p>Anxiety and depression will be the biggest cause of disability by 2020. The WHO estimates that 50 billion years of work will be lost due to anxiety and depression by the year 2030. Unfortunately, risk factors for such disorders have not been understood, with the effectiveness of current psychotherapeutic techniques limited. In a theoretical breakthrough we have identified that pre-frontal mechanisms of attentional control can play a key role in predicting the onset, maintenance and recurrence of emotional vulnerability. In a series of cutting-edge interventions we have shown that attentional control can be targeted and boosted to promote resilience and psychological flexibility reducing emotional vulnerability to anxiety and depression. This talk will discuss the pathways by which resilience in mental well-being can be attained and how it is possible to protect against emotional vulnerability by boosting attentional control. Implications for interventions that exercise attentional control are highlighted for their applications in clinical, sporting and educational settings.</p>
<p>David Carey, <i>Bangor</i> <i>University</i></p> <p>09.11.17</p>	<p><i>“Handedness and cerebral asymmetry: A new look”</i></p> <p>We have known for over a century that left handers and right handers differ in terms of their cerebral asymmetries for language. We know next to nothing about other asymmetries. I'll present data showing that neuroimaging can be really useful for sorting this all out, even though I am a neuropsychologist and never trusted those bloody machines.</p>
<p>Ernest Simons, <i>UH</i></p> <p>16.11.17</p>	<p><i>A meta-analysis and experimental study examining hippocampal structure/function in people with depressive/dysphoric traits</i></p> <p>Depression has been shown to result in hippocampal atrophy in sufferers. The current meta-analysis extracted data from 50 studies (2000+ participants). An overall significant effect of reduced hippocampal volume was found in participants with depression, with atrophy appearing early and remaining stable throughout the illness. There was little evidence of moderating variables (including medication), however, a positive trend for depression severity was observed.</p> <p>Dysphoria is regarded as a state of unhappiness, unlike depression, which is considered</p>

<p>Diamantis Toutounzidis, <i>UH</i></p>	<p>a long-term disorder. However, recent research has found that participants with dysphoria also display reduced hippocampal volume. The study aimed to see if dysphoric participants showed impaired spatial navigation on a hippocampal dependent task. Participants were required to replicate a previously learned route encountered from familiar (egocentric) and unfamiliar (allocentric) directions whilst in head-mounted virtual reality. Results found on average, participants were better over time and for same-direction trials. No significant effects were found for dysphoric group or gender. Possible explanations include: 1) The atrophy being too subtle to be detected by spatial navigation tasks 2) The use of vestibular feedback diminishing any subtle group differences.</p> <p><i>“Childhood traumatic events and schizotypal personality traits”</i> Adverse childhood experiences (e.g., physical, emotional and sexual abuse) have been found to be associated with increased risk of psychosis (Varese et al., 2012). These findings have usually been based on patients’ retrospective accounts of childhood experiences, which could be influenced by a number of factors. For instance, well-documented: a) memory deficits (e.g., Tyson, Laws, Roberts, & Mortimer, 2005); b) executive impairments, such as planning and problem solving (e.g., Holt, Wolf, Funke, Weisbrod, & Kaiser, 2013); and c) reality distortions (e.g., Lee, Chun, Lee, Kang, & Kim, 2013); which are experienced by patients with psychosis. This relationship has rarely been examined in healthy individuals who score highly on schizotypal personality traits. The continuum hypothesis of psychosis and schizophrenia suggests that it is important to assess the relationship in those who are healthy but who experience some psychosis-like symptoms (van Os, Hanssen, Bijl, & Ravelli, 2000). One advantage of examining healthy participants is that recall may not be affected by the condition itself or by memory and executive function problems. In this piece of research we have looked at schizotypal personality traits in the non-clinical population and their relationship to self-reported childhood adversities.</p>
<p>23.11.17</p>	<p><i>No seminar</i></p>
<p>Mel Slater, <i>UCL;</i> <i>University of Barcelona</i></p> <p>30.11.17</p>	<p><i>“Therapeutic and social applications of virtual embodiment”</i> Using immersive virtual reality it is possible to visually substitute the body of a person by a virtual body that is spatially coincident with their real body seen from first person perspective and that moves synchronously with their own movements. This typically leads to a perceptual illusion of ownership over that virtual body. Over the past few years we have studied how the form of the body influences aspects of their physiology, attitudes, behaviours and cognition. Here we will introduce the topic of virtual body ownership, and discuss examples of how this has been used both for personal enhancement and for changing attitudes and behaviors, helping to diminish racial bias, and gender harassment in social situations.</p>
<p>Peter Harris <i>University of Sussex</i></p> <p>07.12.17</p>	<p><i>“Self-affirmation and the response to health-risk information”</i> Self-affirmation (e.g., by reflecting upon one’s important strengths or values) has been found to promote less biased processing of health-risk messages, producing potentially beneficial changes in health-related cognitions and behaviour. Health topics have included breast cancer risks from alcohol, the benefits of eating fruit and vegetables or of taking exercise, and graphic warnings on cigarette packs. I will describe our studies involving self-affirmation, discuss the theoretical underpinnings of the approach, and consider the theoretical and applied implications of our findings.</p>
<p>15.02.18</p>	<p><i>No seminar</i></p>

<p>James Davies Roehampton University</p> <p>22.02.18 18:30-20:00</p>	<p><i>The making of mental disorder: the disturbing truth about the construction of the DSM</i> Why, without solid scientific justification, has the number of mental disorders risen from 106 in the 1960s, to around 370 today? Why has the definition of mental disorder expanded to include evermore domains of human experience? In this seminar, Dr. James Davies takes us behind the scenes of how the psychiatrist's bible, the DSM, was actually written - did science drive the construction of new mental disorder categories like ADHD and major depression or were less-scientific and unexpected processes at play? His exclusive interviews with the creators of the DSM reveal the answer.</p>
<p>Jonathan Katz, <i>Performance in Mind</i></p> <p>01.03.18</p>	<p><i>Supporting the person, not just the performance</i> The classical focus for sport psychology support has focused on 'mental skills' to improve performance outcome. This remains the visible objective in performance sport where athletes and, by extension, coaches and support staff, are frequently judged on athletes' results. The less visible demands and pressures that underpin athletic performance are increasingly being appreciated with psychology support. To that end, this talk will consider performance psychology, preparation psychology, and performance lifestyle demands. It will consider the role of individual well-being and the importance of effective professional relationships that underpin support programmes.</p>
<p>Jane Garrison, Cambridge University</p> <p>08.03.18</p>	<p><i>Knowing what is real: reality monitoring and hallucinations</i> The cognitive process of discriminating between internally and externally generated information is known as reality monitoring. An impairment in this ability is linked to the hallucinatory symptoms of schizophrenia in which patients are unable to reliably discriminate between externally perceived information and that which has been imagined. This impairment is a distinct cognitive deficit in schizophrenia, which may be explained by dysconnectivity in the wider reality monitoring network, mediated by medial anterior PFC dysfunction. Reality monitoring is also associated with the morphology of the paracingulate sulcus, a structure within the medial prefrontal cortex that shows a high level of inter-individual variability. Examination of the structural MRI scans from a large sample of patients with schizophrenia and healthy controls revealed a significant difference in the length of the paracingulate sulcus in patients with hallucinations compared to patients without hallucinations. This finding is notable in linking brain morphology to a key symptom of schizophrenia and has informed the development of neuroanatomical models of hallucination generation in clinical and healthy populations.</p>
<p>Marc Jones, Staffordshire University</p> <p>15.03.18</p>	<p><i>The Challenge of performance, health and well-being</i> Marc is a Professor of Stress and Emotion at Staffordshire University. His work is focused on understanding the psychophysiological response to stress and helping people achieve their potential and improving health and well-being. In the talk Marc will provide an overview of his research into 'challenge' and 'threat' responses to stress as well as his work into the link between engagement with nature and well-being. The protocols, and approach, that Marc, and colleagues, have developed for the assessment, and training of stress responses, have been utilised by professional athletes, sports teams, businesses, education and the military and the application of the research will be outlined in the talk. You can follow Marc on @ProfMarcJones.</p>
<p>Kenny Coventry, University of East Anglia</p> <p>22.03.18</p>	<p><i>Where are my keys? Describing and remembering object location</i> Spatial demonstratives – terms including this and that – are among the most common words across all languages. Yet, there are considerable differences between languages in how demonstratives carve up space and the object characteristics they can refer to, challenging the idea that the mapping between language and the vision and action systems is universal. Overviewing findings from multiple experiments, I show direct parallels between spatial demonstrative usage in English and (non-linguistic) memory for object location, indicating close connections between the language of space and non-linguistic spatial representation. Spatial demonstrative choice in English and immediate memory for object location are affected by a range of parameters – distance, ownership, visibility and familiarity - that are lexicalized in the demonstrative systems of some other languages. The results support a common set of constraints on language used to talk about space and on (non-linguistic) spatial representation itself. While demonstrative systems are not diagnostic of the parameters that affect demonstrative use in a language, demonstrative systems across</p>

	languages may emerge from basic distinctions in the representation and memory for object location. In turn, these distinctions offer a building block from which non-spatial uses of demonstratives can develop.
<p>Simon McCarty-Jones, Trinity College, Dublin</p> <p>12.04.18 18:30-20:00</p>	<p><i>'Hearing voices': what do we know, what don't we know?</i></p> <p>In this presentation, Dr. McCarthy-Jones will explore what we know about voice-hearing and how contemporary research is trying to address what we do not yet know. Areas to be discussed will be the history and phenomenology of the experience, the multiple factors that can contribute to the development of voice-hearing, mediators of the relation between trauma and voice-hearing, what psychological therapies for voice-hearing can and cannot do, and potential new directions to support people distressed by hearing voices.</p>
<p>Ian Rivers, Strathclyde University</p> <p>19.04.18</p>	<p><i>Utilising research to tackle bullying and discrimination in sport: Examining studies of homophobia</i></p> <p>Homophobia, biphobia and transphobia in sport is an issue that has garnered significant attention in the media. However, evidence of the extent of this issue is contested. In the presentation the issue of what constitutes 'research' and how it should be used is explored. Particular focus is paid to representations and misrepresentations of research and how they enter the public policy sphere. Examples of research drawn from academic study as well as studies conducted by third sector organisations are used as examples. Overall, the question of authenticity in representation research, particularly in public spheres, is considered and the presenter offers some insights from his own experiences of giving evidence to parliamentary committee.</p>
<p>Laurence Barsalou, University of Glasgow</p> <p>26.04.18</p>	<p><i>Situated conceptualization</i></p> <p>One way of construing brain organization is as a collection of neural systems that processes the components of a situation in parallel, including its setting, agents, objects, self-relevance, internal states, actions, outcomes, etc. In a given situation, each situational component is conceptualized individually, as when components of eating in a kitchen are conceptualized as <i>kitchen</i> (setting), <i>diner</i> (agent), <i>food</i> (food), <i>hunger</i> (internal state), and <i>chewing</i> (action). In turn, global concepts integrate these individual conceptualizations into larger structures that conceptualize the situation as a whole, such as <i>eating</i> and <i>meal</i>. From this perspective, a situated conceptualization is a distributed record of conceptual processing in a given situation, across all the relevant component systems each distributed throughout the brain. On later occasions, when cued by something in the external or internal environment, a situated conceptualization becomes active to simulate the respective situation in its absence, producing multimodal pattern-completion inferences that guide situated action (e.g., activating a situated conceptualization to simulate and control <i>eating</i>). From this perspective, the concept that represents a category, such as <i>kitchen</i> or <i>eating</i>, is the collection of situated conceptualizations that has accumulated from processing the category across situations, similar to exemplar theories. The utility of situated conceptualization as a general theoretical construct is illustrated for situated action, social priming, social mirroring, emotion, and appetitive behaviors, as well as for habits and individual differences.</p>
<p>Garry Tew, Northumbria University</p> <p>03.05.18</p>	<p><i>Intermittent claudication - a real pain in the ... leg. Don't worry, just walk it off!</i></p> <p>Peripheral arterial disease is a common but under-recognised cardiovascular condition in older adults. This disease is usually identified when patients present with exertional leg pain, a symptom referred to as intermittent claudication. This symptom limits people's walking distance, and is associated with reduced quality of life. The National Institute of Health and Care Excellence (NICE) recommends a 3-month supervised exercise programme to improve walking ability and quality of life in people with intermittent claudication. However, access to supervised exercise therapy is limited in the United Kingdom. This talk will provide an overview of the evidence base on exercise for intermittent claudication and will provide recommendations for exercise professionals working with this population.</p>

All are invited for drinks and snacks after the talks in the Psychology and Sport Sciences Staff Room (2H256) in CP Snow. Enquiries: Lia Kvavilashvili (l.kvavilashvili@herts.ac.uk), Paul Jenkinson (p.jenkinson@herts.ac.uk), and Lindsay Bottoms (l.bottoms@herts.ac.uk).