Psychology and Sport Sciences Research Seminars 2019-2020

SEMESTER B

Day & Time: Thursdays 16.00-17.30 (but see a different start time on 19 March)

Locations: 1H279 (CP Snow) and E351 and E350 (main building) on College Lane Campus

Date	Speaker / Topic	Room
13.02.20	Glenda Fredman, Camden & Islington NHS Foundation Trust (Visiting Professor at UH) Travelling with psychology across the centuries (Inaugural Lecture)	E351
20.02.20	Katherine Brown, Coventry University (now at UH) Behaviour change and health improvement: working with Public Health systems and stakeholders for real-world impact of interventions	1H279
27.02.20	Lettie Bishop, Loughborough University Upping the 'anti-'; Can we treat chronic inflammation with physical activity?	1H279
05.03.20	Alan St. Claire Gibson, University of Essex Contemporary concepts In the regulation of exercise performance	1H279
12.03.20	Sam Gilbert, University College London Outsourcing memory to the external environment: Effort, metacognition, and cognitive offloading	1H279
19.03.20 6:30-8:00 pm	Special UH-British Psychological Society (BPS) London and Home CountiesNetworking EventRichard Wiseman, University of HertfordshireThe Apollo mindset: Making mission impossible, possible	E350
26.03.20	Rick Henson, University of Cambridge (MRC Cognition & Brain Sciences Unit) Relating age, brain and cognition: results from the Cambridge Centre for Ageing & Neuroscience (CamCAN)	1H279
02.04.20	William Wong, Middlesex University How police analysts think: Design for sense making	1H279
23.04.20	Krystian Barzykowski, Jagiellonian University, Krakow, Poland Why are we not flooded by involuntary thoughts about the past and future? Testing the cognitive inhibition hypothesis	1H279
30.04.20	Joanne Dickson, Edith Cowan University, Australia Recent goal motivation processes and prospective cognitions implicated in affective symptoms and well-being	1H279

07.05.20	Duncan Guest, Nottingham Trent University	1H279
	The capacity of imagination	

Speaker	Abstract
Glenda Fredman	Travelling with psychology across the centuries
13.02.20	Glenda will track her personal and professional journey with psychology from her first encounters with the discipline as an undergraduate psychology student in 1972 to 2020 when she currently works as a clinical psychologist, systemic psychotherapist, researcher and trainer. She will share the key principles and concepts that have guided her practice and offered a resource to her personal life.
Katherine Brown,	Behaviour change and health improvement: working with Public Health systems
Coventry	and stakeholders for real-world impact of interventions
University (now	
at UH) 20.02.20	Health Psychology is a broad discipline with research spanning a range of fields relevant to every part of the health and social care systems. In the UK, applying health psychology to healthcare in the NHS has typically received greater attention than Public Health with regards implementing research evidence into practice. Prevention of ill-health and maintaining health and wellbeing are however fundamental to both Health Psychology and Public Health. Arguably, both fields working in partnership to forge a stronger future and greater success at improving
	working in partnership to forge a stronger future and greater success at improving health outcomes is likely to be of great benefit. One way to achieve this is through increasing collaboration between public health departments and research-active health psychologists. In this seminar I will draw on over a decade's experience of working in this way. I will illustrate how the collaboration itself provides otherwise unidentified opportunities to work with existing systems and service infrastructure that can provide a clear pathway to impact. Of course, realising the impact is less straightforward because a range of factors including those outside of a researcher's sphere of influence can affect the ultimate outcome. In addition, I will discuss the findings from and progress of research with commissioners and providers of public health improvement services where we have tried to understand more about the ways in which we can better support the application of our research findings from health psychology into public health practice. This research has helped identify a number of other avenues on which to focus our efforts for supporting mobilisation of evidence into practice.
Lettie Bishop,	Upping the 'anti-'; Can we treat chronic inflammation with physical activity?
Loughborough University	Chronic systemic inflammation underlies the development and persistence of several
27.02.20	long-term conditions including heart, lung and kidney diseases, diabetes, dementia and certain cancers. It is also present in many apparently healthy people
	long before the development of overt disease. Higher levels of physical activity are associated with reduced markers of systemic inflammation and the so-called 'anti- inflammatory' effect of exercise is gaining attention as we search for cost-effective interventions to prevent or delay onset of these conditions. In this talk, I will use examples from our research and others to illustrate the different ways that exercise can positively alter the characteristics of inflammatory immune cells in clinical and non-clinical populations, and how 'upping the anti-' through physical activity could act as an behavioural adjuvant for traditional therapies.

Alan St. Claire	Contemporary concepts In the regulation of exercise performance
Gibson,	
University of	Without regulatory mechanisms, there would be no order and structure to
Essex	physiological systems and their performance during physical activity. A variety of
05.03.20	physiological systems and their performance during physical activity. A variety of theories have been proposed to explain regulatory activity in single physiological systems as diverse as gene activity, fuel substrate utilization, muscle function and whole body function, all of which are relevant to the system being described, but do not adequately describe regulation across the complex structure which is the human body, where multiple systems must of necessity interact and where regulatory systems may in fact be required compete with each other either tactically or strategically in order that life is sustained in changing external environments. The purpose of this presentation is to examine the historical development of the single system regulatory theories and their strengths and shortcomings, and to describe the presenter's own work of the last twenty five years, which has attempted to unify these different control theories by suggesting that similar simple design control processes may underpin these control mechanisms and structures at different levels of physiological function, and that balance between competing tactical variables and physiological systems is at the root of multiple system regulation during exercise performance.
Sam Gilbert,	Outsourcing memory to the external environment: Effort, metacognition, and
University College	cognitive offloading
London	
12.03.20	Technology increasingly enables us to offload our memories in external devices, for
	example when we write information down, photograph to-be-remembered objects,
	or program smartphone alerts to remind us of intended activities. This practice is
Richard	ancient, and concerns about its impact on organic memory date back at least to the time of Socrates. However, only recently has "cognitive offloading" become the subject of sustained and systematic study. This talk will review recent investigations of cognitive offloading, focusing particularly on two questions: A) what is the impact of cognitive offloading on human memory, and B) what are the processes that trigger it: how do we decide whether to offload memories or store them internally? Evidence shows that the impact of offloading on memory is complex, and it is oversimplistic to think of it as straightforwardly good or bad. As for the question of how we decide whether or not to offload memory, evidence points to a key role of metacognitive evaluations such as feelings of confidence. Therefore, improving the accuracy of metacognitive evaluations can improve individuals' adaptive use of cognitive tools in everyday life.
Wiseman,	The Apono minuset. Making mission impossible, possible
University of	Fifty years ago, humanity reached for the stars and achieved the seemingly
Hertfordshire	impossible. Richard interviewed many of the surviving Apollo controllers about the mindset behind their stunning achievement. In this talk he will share the Apollo story
19.03.20	from the perspective of psychology and leadership, examining the roles of responsibility and trust; attitudes to failure; passion and purpose; self-belief and
UH-BPS event	agility. Discover how everyone can adopt a mindset to make the seemingly impossible possible.
Rick Henson,	Relating age, brain and cognition: results from the Cambridge Centre for Ageing &
University of	Neuroscience (CamCAN)
Cambridge	I will describe a range of results from cognitive, brain imaging and lifestyle investigation of approximately 700 healthy people from 18-88 years of age in the

26.03.20	CamCAN project (www.cam-can.org), including: 1) effects of age on different types of memory, and their grey- and white-matter correlates; 2) state-dependent effects of age on brain connectivity across rest, a simple sensorimotor task and movie-watching; 3) (de)differentiation of cognition, white-matter and of the relationship between cognition and white-matter; 4) lack of evidence for functional compensation in prefrontal cortex in ageing and 5) the importance of mid-life, non-occupational activities for cognitive reserve in old age.
William Wong, Middlesex University	How police analysts think: Design for sense making In this talk, I will introduce VALCRI - an EU-funded project tasked to research and
02.04.20	develop a next generation criminal intelligence analysis and investigation system for police. Selected IP from the project was acquired by industry and is being commercialised. One of the goals for VALCRI was to develop a technology that would assist police analysts and investigators make sense of fragmentary, missing, and ambiguous data in the context of large volumes of data. In this talk I will discuss the triple triangle model of sense making. This model was developed to describe how analysts think, rather than what they do, for the purpose of identifying system design specifications. It represents the range of variability in analytic reasoning that the VALCRI system should be designed to accommodate. I will also discuss some examples of how we used methods of cognitive engineering to translate some of the reasoning strategies into design.
Krystian	Why are we not flooded by involuntary thoughts about the past and future? Testing
, Barzykowski,	the cognitive inhibition hypothesis
Jagiellonian	
University	The main goal of my talk is to present results of studies addressing the question of
23.04.20	why we are not constantly flooded by involuntary future thoughts (IFTs) and involuntary autobiographical memories (IAMs) given that they are often triggered by incidental cues while performing undemanding activities. In this research, we investigated possible mechanisms underlying involuntary mental time travel, namely, the extent to which IAMs and IFTs depend on cognitive inhibition on one hand, and cognitive load, on the other. Given the argument that the key mechanism of IAMs and IFTs may be the ability to inhibit and suppress memories that are irrelevant to or inconsistent with current self-goal (e.g. Conway & Pleydell-Pearce, 2000; Hasher, Zacks, & May, 1999), we might expect that the stronger inhibitory mechanism participants have, the fewer IAMs and IFTs they experience. In addition, this relationship may be modified by the cognitive load of the ongoing tasks. To address these important questions, we launched a systematic investigation, using a novel laboratory method of studying IAMs and IFTs, and applying individual differences approach to study involuntary mental time travel. A series of three experiments were conducted, each of which teased apart cognitive inhibition mechanism from a different angle to contribute to a more complete and comprehensive understanding of this topic.
Joanne Dickson,	Recent goal motivation processes and prospective cognitions implicated in affective
Edith Cowan	symptoms and well-being
University, Australia	Increasingly percent goal regulation and goal divergeulation processes and
AUSUUIIU	Increasingly personal goal regulation and goal dysregulation processes and
30.04.20	prospective cognitions are being implicated in the maintenance of wellbeing, affective disorders and symptoms. In this talk, Joanne will present research that has investigated goal motivation and related prospective cognitions in relation to mental health, using non-clinical, sub-clinical and clinical samples. Motivation and goal

	pursue them. For example, studies have investigated conditional goal setting, goal orientation and expectancies, goal discrepancies, rumination and emotional symptoms. In the context of this research relevant theoretical frameworks will be briefly covered, and the potential relevance of the research and avenues for future research explored.
Duncan Guest,	The capacity of imagination
Nottingham Trent	
University	"Logic will take you from A to B. Imagination will take you everywhere" - A
	Einstein. How true this is may depend on the vividness of our imagination. Most of us
07.05.20	imagine, and most of us will probably feel that the vividness of our imagination is
	limited in its capacity. Exactly what these capacity limitations are however have yet
	to be determined. Research shows that there is a significant degree of overlap in the
	brain areas activated during visual imagery tasks and visual working memory tasks
	and that performance in visual imagery tasks and visual working memory tasks is
	related. Considerable work has also shown that visual working memory has significant capacity limitations, with estimates often in the range of 4 items
	(although it is also seen as a flexible resource). If visual imagery and visual working
	memory share many of the same underlying processes, it might then be expected
	that similar capacity limitations may be shown in these tasks. The current work
	explores this question by examining the capacity (in terms of the number of items) of
	visual imagery and visual working memory in related tasks. Initial experiments
	refined a methodology that, combined with computational modelling yielded
	estimates of the number of items that could be imagined/remembered. Subsequent
	experiments explored whether these findings were due to methodological issues.
	The results provide greater insight into the relations between visual imagery and
	visual working memory.

All are invited for drinks and snacks after the talks in the Psychology Staff Room (2H256) in CP Snow. Enquiries: Lia Kvavilashvili (l.kvavilashvili@herts.ac.uk), Katherine Brown (k.brown25@herts.ac.uk) and Lindsay Bottoms (l.bottoms@herts.ac.uk)