## Centre for Applied Psychology

## Semester One, September – December 2017 Seminar Extracts

27.09.17 Dr Louise Bunce (Oxford Brookes University)

**The emergence of the student consumer in higher education and its implications for learning and teaching**

Students studying at universities in England have been defined as customers by the government since the introduction of student tuition fees (Dearing et al., 1997). This talk will present data from a number of recent studies to explore the impact of students identifying as their university's consumers on academic outcomes. Data will be presented that reveals what factors are related to whether students identify themselves as consumers, and the impact of identifying as a consumer on students' approaches to learning and academic performance. Discussion will focus on the impacts of the emerging student 'consumer' for teaching and learning in higher education.

04.10.17 Prof Joydeep Bhattacharya (Goldsmiths, University of London)

**Creativity: Through Advanced Brain Mapping and Stimulation**

Creativity is the driving force behind every progress in human civilization yet it is one of the least understood cognitive constructs. As it is complex and multifaceted, we need to have multi-measure neuroscientific approach in order to reveal the neuronal mechanisms underlying various stages of creative problem solving. Using a combination of neuroimaging techniques like ultra high field fMRI, high density EEG, I will present a neuronal trajectory of creative cognition. For example, what happens at the Aha! moment? Are there remote neural precursors to it? I will further present some recent findings showing how brain stimulation can specifically benefit our creative thinking by overcoming persistent mental biases.

18.10.17 Dr Marie Poirier (City, University of London)

**Knowledge effects on short-term memory for visual items: Do you remember what you see or what you know?**

It is well established that factors based on our knowledge of the language—such as lexicality, familiarity, and concreteness—have a sizable impact on immediate memory for verbal material. Recently, a number of studies have also examined the effects of prior knowledge on immediate memory for the visual properties of items. In this talk, I will review studies from our lab that explored the influence of multiple levels of knowledge on visual working memory (VWM). In line with previous findings, our results show an overall central-tendency bias whereby items are remembered as being closer to the overall average or central tokens than they actually are. Moreover, when object-level knowledge is available for the to-be-remembered items, a further object-based bias is apparent in responses. These results extend findings reported for episodic memory to VWM and contribute to the growing literature which illustrates the complexity and flexibility of the representations subtending VWM performance (e.g. Bae, Olkkonen, Allred, & Flombaum, 2015; Hemmer & Steyvers, 2009). The reported results fit well with models that assume that both immediate and long-term memory rely on the same representation and reconstruction mechanisms.

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01.11.17 Dr Silvio Aldrovandi (Birmingham City University)

**Risk preferences: Domain and priming effects**

In this talk, I will describe different research projects that explore people’s risk preferences. I will argue that the latter are sensitive to different types of contextual information. Previous studies have demonstrated that risk attitudes change when the very same probabilities and amounts are framed as gains or losses. In the first study, we examined whether risk preferences are influenced by whether identical prospects (in the form *x*% chance of *p*, otherwise *y*) are framed as either of seven financial products (e.g., investment and insurance). In the second study, we utilised a semantic-priming paradigm to manipulate accessibility of information independently of beliefs about the frequencies of risky events. In the last study, we explored whether the effect of negative priming on risk preferences is moderated by the financial context in which a choice is framed. Overall, the research findings are not anticipated by previous assumptions—for example, the descriptive invariance axiom of expected utility theory, which states that equivalent formulations of a choice problem give rise to the same preference order. The results also call into question the generalisability of priming effects on different financial contexts.

15.11.17 Dr Bastiaan Rutjens (University of Amsterdam, Netherlands)

**Evaluations of science and scientists**

As science continues to progress, attitudes towards science seem to become increasingly polarized. Whereas some people put their faith in science, others structurally reject and dismiss scientific evidence. One reason for this is that many of the topics that scientists are interested in are relevant to people’s moral attitudes and ideological views on society and the world. In this talk, I will review two strands of research that may inform our understanding of science acceptance and rejection. The first line of work concerns *evaluations of science*. I will present three studies in which the ideological antecedents of science skepticism, faith in science, and willingness to support science are systematically investigated. The second line of research concerns *evaluations of scientists*. I will present a small selection of studies from an ongoing project that focuses on the associations and stereotypes that people have about scientists.

27.11.17 Prof. Martin Hagger (Curtin University, Western Australia)

**Ego-depletion: Updates on replication and mechanisms, and implications for health behaviour**

The ego-depletion effect has been celebrated and much maligned in equal measure. In this presentation, I will outline the chequered history of the ego-depletion effect and ‘strength’ model of self-control from its inception and rise as a dominant effect and theory in psychology, to concerns over its replicability and the explanatory value and validity of strength model claims. I will outline the basic ideas behind the effect and its origins, typical means to test and measure it, competing explanations, and controversies and questions over its existence. In particular, I will draw from cumulative evidence from numerous meta-analyses of the effect and a recent multi-lab replication. I will also outline how responses to the replication has served to catalyze new research and replications efforts toward moving the field forward. I will also outline some research conducting on ego-depletion in the field of health behaviour, particularly dieting, alcohol consumption, smoking, and physical activity. I will argue that some of the consistent effects for ego-depletion exist in applied contexts, particularly for appetitive, rewarding behaviours. I will use this as a basis to suggest future directions for research in this domain.

29.11.17 Dr Elisa Lewis (London South Bank University)

**A mixed methods study of mental health and wellbeing in different UK undergraduate student populations**

Research has identified poor mental health and an increased suicide risk in medical occupational groups. However, there has been less research involving the students destined for careers in these fields, and few direct comparative studies. This research aimed to address this omission by estimating and comparing the prevalence of mental ill-health in undergraduate students of medicine, veterinary medicine, dentistry, and pharmacy.

As the first study to compare the mental health of these populations it was possible to establish key differences. Relatively high wellbeing among medical and veterinary students compared with law students contrasts with observations in the professions. Qualitative interviews provided key insights into what it is like to be a veterinary or law student, and how this impacts upon wellbeing. These findings inform discussions around student mental health and provide an evidence base for the development of appropriate support and intervention.

13.12.17 Prof Graham Braithwaite (Cranfield University)

**The role of Human Factors in improving aviation safety**

As Professor of Safety and Accident Investigation, Graham Braithwaite will be speaking about the role of Human Factors in understanding and enhancing safety in aviation (and other safety critical industries), the role of aviation psychologists, ongoing research in Cranfield’s Safety and Accident Investigation Centre, and his aspirations for the new £65 million Digital Aviation Research and Technology Centre (DARTeC) at Cranfield University.