

**Part I PBS Tripos**  
**PBS 1: Introduction to Psychology**  
**2020/21 Course Guide**

**Course Organiser**

Dr Kate Plaisted-Grant

E-mail: [kcp1000@cam.ac.uk](mailto:kcp1000@cam.ac.uk)

**Useful information**

This course aims to introduce a variety of theoretical and methodological approaches to the study of psychology. Students from other Triposes take the PBS 1 Introduction to Psychology course and it is taught in such a way to allow any student who has never studied Psychology (or Biology) to follow the material.

The Department runs a PBS Tripos website on Moodle to support all students taking this paper:

<https://www.vle.cam.ac.uk/course/view.php?id=292&sectionid=3182>

If you are not already enrolled in this site, please contact our librarian, Daniele Campello ([library@psychol.cam.ac.uk](mailto:library@psychol.cam.ac.uk)) or the Teaching Administrator, [teaching@psychol.cam.ac.uk](mailto:teaching@psychol.cam.ac.uk)

Teaching is via lectures, most of which will be pre-recorded and uploaded to Moodle at the time specified on the timetable below, on-line, live discussion sessions at times specified in the timetable and personal study backed up by supervisions.

Students with disabilities and/or particular learning needs should discuss assessments with the Course Leader to ensure they are able to fully engage with all assessment within the course.

**Brief description of the course**

Across the course, a series of four broad topics will be explored: Individual Differences, Construction of Social Reality, Mind and Body and Decision Making. Within each topic, you will be introduced to specific research areas which contribute knowledge to those topics from different research perspectives. You will also see that psychology is a very broad science, full of debates, discrepancies and disagreements: at the end of each Topic, the contributing lecturers will hold a (remote) live discussion of the Topic between themselves and welcoming any contributions from you.

**Educational Aims**

The course has been designed to deliver these educational aims:

- Provide students with knowledge about the breadth of psychology, its range of research questions, research methods and theoretical perspectives.
- Provide students with the opportunity to gain some specialised knowledge of specific research areas in psychology.

- Provide students with the opportunity to understand how different research *approaches* in psychology relate to each other.
- Provide students with the opportunity to understand how to integrate material across different areas of psychology
- Provide students with the opportunity to recognise valid forms of argument which allow psychological research to progress

### **Student learning outcomes**

Students should keep these educational aims in mind as they evaluate their progress in achieving the student learning outcomes. These are:

- Demonstrate conceptual knowledge of specific research areas in Psychology.
- Demonstrate knowledge of research approaches and techniques used in Psychology that are suitable for particular kinds of research question
- Demonstrate knowledge of the different perspectives within a Topic
- Demonstrate understanding of how different perspectives can be integrated
- Develop the ability to recognise what is and what is not an appropriate, objective and defensible conclusion about research outcomes
- Develop the ability to write cogent essays which demonstrate knowledge and understanding of the above.

### **Mode of Assessment**

The course is assessed by means of a single examination, testing the student learning outcomes above. The examination will consist of a written paper requiring students to answer essay questions. Questions will be in two sections. Section A will ask questions drawn from specific lectures within a Topic and Section B will ask questions requiring candidates to integrate material across lectures in a Topic **and**, where relevant, across the entire course. Please note that there is no minimum or maximum total number of questions drawn from any of the four Topics on the Course. Students are therefore advised to prepare all Topics for the Examination.

***Please note that more information on the examination and a sample paper will be provided at the start of term.***

### **Supervision Arrangements**

For many students, arrangements for supervisions will already have been made by their Director of Studies. Where this is not the case, please contact your College DoS or Tutorial Office to make arrangements.

Typically, students receive about eight supervisions in total, although each College provides its own guidelines about number and frequency of supervisions for its students. Each supervisor for the paper is normally prepared to provide all the supervisions necessary.

Suggested essay titles for supervision are included in this Guide and sometimes on lecture handouts.

### Course References

Suggested reading is also included in this Guide, some of which is marked “recommended” and some “additional”. Some lecturers will give more references in their lectures. **Please note that you are not expected to read everything on the lists, and certainly not before the start of lectures.** Instead, you may wish to sample one or two references in advance, but you should follow the advice of your supervisor concerning how much reading is suitable for achieving the learning objectives.

### Lecture Schedule

#### Michaelmas Term

<i>Topic</i>	<i>Lecture</i>	<i>Who</i>	<i>When</i>
<b>Introduction</b>	Introducing the course	K.C. Plaisted-Grant plus others	09/10/2020 2pm
<b>Individual Differences</b>	Gender 1	D. Spencer	12/10/2020 11am
	Gender 2	D. Spencer	16/10/2020 2pm
	Personality 1	J. Rentfrow	19/10/2020 11am
	Personality 2	J. Rentfrow	23/10/2020 2pm
	IQ 1	K.C. Plaisted-Grant	26/10/2020 11am
	IQ 2	K.C. Plaisted-Grant	30/10/2019 2pm
	IQ 3	K.C. Plaisted-Grant	02/11/2020 11am
	Lecturers’ Discussion of the Individual Differences Topic	D. Spencer, J. Rentfrow, K.C. Plaisted-Grant	06/11/2020 2pm
<b>Constructing Social Reality</b>	Social and Cognitive Development 1	S. Imrie	09/11/2020 11am
	Social and Cognitive Development 2	S. Imrie	13/11/2020 2pm
	Social and Cognitive Development 3	S. Imrie	16/11/2020 11am
	Perception of Faces 1	J. Mollon	20/11/2020 2pm
	Perception of Faces 2	J. Mollon	23/11/2020 11am
	Social Cognition 1	J. Garrison	27/11/2020 2pm
	Lecturers’ Discussion of the Constructing Social Reality Topic	S. Imrie, J. Mollon, J. Garrison	30/11/2020 11am

## Lent Term

<i>Topic</i>	<i>Lecture</i>	<i>Who</i>	<i>When</i>
<b>Mind and body</b>	Emotion 1	S. Schnall	22/01/2021 2pm
	Emotion 2	S. Schnall	25/01/2021 11am
	Emotion 3	S. Schnall	29/01/2021 2pm
	Mental Health 1	K.C. Plaisted-Grant	01/02/2021 11 am
	Mental Health 2	K.C. Plaisted-Grant	05/02/2021 2pm
	Mental Health 3	K.C. Plaisted-Grant	08/02/2021 11 am
	Mental Health 3	K.C. Plaisted-Grant	12/02/2021 2pm
	Lecturers' Discussion of the Mind and Body Topic	S. Schnall, K.C. Plaisted-Grant	15/02/2021 11 am
<b>Decision Making</b>	Neuroscience of Decision Making 1	D. Talmi	19/02/2021 2pm
	Neuroscience of Decision Making 2	D. Talmi	22/02/2021 11am
	Political Decision-Making 1	L.H. de-Wit	26/02/2021 2pm
	Political Decision-Making 2	L.H. de-Wit	01/03/2021 11am
	Political Decision-Making 3	L.H. de-Wit	05/03/2021 2pm
	Political Decision-Making 4	L.H. de-Wit	08/03/2021 11am
	Political Decision-Making 5	L.H. de-Wit	12/03/2021 2pm
	Lecturers' Discussion of the Mind and Body Topic	D. Talmi, L.H. de-Wit	15/03/2021 11am

### Topic 1 - Individual Differences

After a live on-line introduction session (9<sup>th</sup> Oct, 2pm, Dr Kate Plaisted-Grant et al), the course begins with the study of measurable differences between people. On the whole, studying individual differences has been regarded as a somewhat separate enterprise to experimental psychology, which attempts to control for individual differences in its pursuit of general laws of behaviour, mechanisms of the mind and (neuro)cognitive processes common to all. Instead, "differential psychology" has tended to focus on differences between people in traits, classically intelligence (or more accurately IQ) and personality.

The study of these areas has thrown up some fascinating findings and as you might imagine a wealth of data. One of the greatest challenges in the study of individual

differences is how to make sense of these data<sup>1</sup>. Any number of explanations seem possible so how can (or should) we constrain our hypotheses in any scientific study of differences between people? Can we rely simply on rigorous methodology, and if so, what methods would be best? And if not, what are the alternative means by which we can decide between this and that interpretation? (Keep these questions in mind as you attend the lectures, and perhaps discuss them in supervisions. You will find that this approach to the material will allow you to develop your skills as a psychologist).

Although the study of individual differences has typically studied traits, every experimental psychologist is only too aware of the individual differences participants bring to their highly controlled experiments. Increasingly, psychology recognises that there is a potential wealth of information in this variability. We start the topic with lectures on individual differences in Gender, taking a developmental approach to the Topic. While “sex” is often considered a relatively inflexible trait, the processes involved in gender formation allow for far greater variability and fluidity. These will be followed by lectures on Personality and IQ. Each of these two research areas adopt psychometric and behavioural genetics approaches to the Topic.

### ***Individual Differences: Gender***

Dr Debra Spencer

12<sup>th</sup> and 16<sup>th</sup> October

#### *Outline*

Although girls and boys, as well as men and women, are largely similar psychologically and behaviourally, there are some areas of average difference. These lectures will discuss the nature of these differences, as well as their sizes and the factors that might cause them. A major focus will be on children’s play behaviour, which shows large gender differences, and in regard to which a range of factors, including gonadal hormones during prenatal and neonatal development, reinforcement by parents and peers, and self-socialization, have been studied and found to contribute.

#### *Recommended Reading*

General overview:

Hines M (2004) *Brain gender*. Oxford University Press, New York (Chapters 1 – 4 and chapter 6).

#### *Additional reading*

Maccoby EE (1998) *The two sexes: Growing apart and coming together*. Harvard University Press, Cambridge, Mass

Alexander GM, Hines M (2002) Sex differences in response to children's toys in nonhuman primates (*cercopithecus aethiops sabaeus*). *Evolution and Human Behavior* 23:467-479

---

<sup>1</sup> You may already have noticed that “data” is often used in the singular in conversation, by the media etc, even though it is the plural of “datum”. Perhaps this is because people use “data” as a shorthand for “data set”. Either way, because you will be using the term so frequently in your study of Psychology, it’s worth deciding now whether you will adopt the plural “data” or the singular “data set” in your writing (and we can all agree on using “datum” for a single point in a data set!).

- Hyde JS (2005) The gender similarities hypothesis. *American Psychologist* 60:581-592
- Lytton H, Romney DM (1991) Parents' differential socialization of boys and girls: A meta-analysis. *Psychological Bulletin* 109:267-296
- Masters JC, Ford ME, Arend R, Grotevant HD, Clark LV (1979) Modeling and labelling as integrated determinants of children's sex-typed imitative behavior. *Child Development* 50:364-371
- Pasterski VL, Geffner ME, Brain C, Hindmarsh P, Brook C, Hines M (2005) Prenatal hormones and postnatal socialization by parents as determinants of male-typical toy play in girls with congenital adrenal hyperplasia. *Child Development* 76:264-278
- Perry DG, Bussey K (1979) The social learning theory of sex difference: Imitation is alive and well. *Journal of Personality & Social Psychology* 37:1699-1712
- Seavey AA, Katz PA, Zalk SR (1975) Baby X: The effect of gender labels on adult responses to infants. *Sex Roles* 1:103-109
- Wong WI, Pasterski VL, Hindmarsh PC, Geffner ME, Hines M (2012) Are there parental socialization effects on the sex-typed behavior of individuals with congenital adrenal hyperplasia? *Archives of Sexual Behavior* 42:381–391.
- Lamminmaki, A., Hines, M., Kuiri–Hanninen, T. Kilpelainen, L., Dunkel, L. & Sankilampi, U. (2012). Testosterone measured in infancy predicts subsequent sex–typed behavior in girls and in boys. *Hormones and Behavior*, 61: 611–616.

#### *Suggested supervision essay titles*

- Why do some children show more gender-typical behaviour than others?
- Are sex differences in children's play behaviour inevitable?

### **Individual Differences: Personality**

Dr Jason Rentfrow  
19<sup>th</sup> and 23<sup>rd</sup> October

#### *Outline*

Individual differences in personality are perhaps one of the most fascinating yet frustrating topics studied in psychology. Fascinating because of its richness and complexity, frustrating because there is little consensus about what personality is exactly. These lectures review some of the dominant theoretical perspectives about personality and the ways in which it is typically assessed.

#### *Recommended Reading*

- Funder, D. C. (2010). *The personality puzzle*. New York: W. W. Norton & Company. [Chapters: 4, 8 – 18] Available as eBook
- John, O.P., Robins, R.,W., & Pervin, L. (2010). *Handbook of Personality, Third Edition: Theory and Research*. New York: Guilford Press. Available as eBook
- Hogan, R., Johnson, J. A., & Briggs, S. R. (1997). *Handbook of personality psychology*. Elsevier. Available as eBook

#### *Additional Reading*

Bleidorn, W., Hill, P. L., Back, M. D., Denissen, J. J., Hennecke, M., Hopwood, C. J., ... & Orth, U. (2019). The policy relevance of personality traits. *American Psychologist*, 74(9), 1056.

- Buss, D. M. (1987). Selection, evocation, & manipulation. *Journal of Personality and Social Psychology*, 53, 1214-1221.
- De Raad, B. et al., (2010). Only three factors of personality description are fully replicable across languages: A comparison of 14 trait taxonomies. *Journal of Personality and Social Psychology*, 98, 160-173.
- Gosling, S. D. (2001). From mice to men: What can we learn about personality from animal research? *Psychological Bulletin*, 127, 45-86.
- Mehl, M. R., & Pennebaker, J. W. (2003). The sounds of social life: A psychometric analysis of students' daily social environments and natural conversations. *Journal of Personality and Social Psychology*, 84, 857-870.
- Ozer, D., & Benet-Martínez, V. (2006). Personality and the prediction of consequential outcomes. *Annual Review of Psychology*, 57, 401-421.
- Roberts, B.W., Kuncel, N.R., Shiner, R., Caspi, A., & Goldberg, L.R. (2007). The comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. *Perspectives on Psychological Science*, 2, 315–345.
- Wrzus, C., & Roberts, B. W. (2016). Processes of Personality Development in Adulthood The TESSERA Framework. *Personality and Social Psychology Review*, 1088868316652279.

#### *Suggested supervision essay titles*

- What are the limitations of current conceptualizations of personality and how serious are they?
- What are three mechanisms responsible for behavioural manifestations of personality? Give examples to illustrate how the mechanisms work.

### ***Individual Differences: IQ and Intelligence Testing***

Dr Kate Plaisted-Grant

26<sup>th</sup>, 30<sup>th</sup> October, 2<sup>nd</sup> November

#### *Outline*

The history testing of individual differences in intelligence or IQ is controversial and has thrown up some quite extreme views about the data. These lectures provide a short history of intelligence testing, the definition and measurement of IQ, principles of test construction and reliability and validity of IQ tests. We will also address the concept of the heritability of IQ and procedures for estimating heritability, twin studies and adoption studies. We will consider test bias and studies of group differences in intelligence, taking a critical look at the claims made about any differences and what possible reasons may have motivated researchers to conduct such studies.

#### *Recommended Reading*

Mackintosh, N. (2010). *IQ and Human Intelligence*, 2nd edition. Oxford University Press. (An excellent and informative discussion – highly recommended)

Deary, I. (2001). *Intelligence: A Very Short Introduction*. Oxford University Press.

#### *Suggested supervision essay titles*

- How would you design a new IQ test, and why?
- Do studies of group differences in IQ tell us anything of scientific merit?

### ***Individual Differences - Discussion of the Topic***

Dr D Spencer, Dr J Rentfrow and Dr K Plaisted-Grant

6<sup>th</sup> November

This will be a live session delivered on-line.

## **Topic 2 - Constructing Social Reality**

This topic tackles what seems at face value to be the simplest of psychological tasks – perceiving and understanding others’ intentions, desires and actions. However, we only need to consider how often misunderstandings (minor and major) occur during social interaction, misjudgements in predicting what people will do and misconceptions of others’ actions to realise that our concept of the social world is a construction from many inputs and influences. Nonetheless, there are data obtained through techniques from experimental psychology and neuroscience, that are consistent with the view that there are some very simple and direct neurocognitive mechanisms for social perception.

It may be that evolution has furnished the immature brain with specialised innate mechanisms dedicated to social perception which serve to scaffold more complex constructions of the social world. One way of finding out is to take a developmental approach to the Topic, which provides data on perceptual and cognitive capacities at different ages. These data can help to constrain our theories and hypotheses about the nature and origin of the processes and mechanisms underpinning the construction of social reality. The study of development has also demonstrated the critical role played by interpersonal experiences and cultural influences.

The question of innate mechanisms for social perception can also be investigated using adult participants and techniques used in experimental psychology. Face recognition is one of the most commonly used mechanisms in those with vision to identify others. But underpinning any social perception mechanisms is the ability to make a distinction between myself and the others I am interacting with. Without the distinction between self and other, it seems implausible that any approximate model of the social world would even be possible. Which makes it all the more surprising that errors of self-other attribution are quite common. The final lecture will describe research on the neural mechanisms that may underlie the ability to know what information pertains to “self” and what to “other”.

### ***Constructing Social Reality: Social & Cognitive Development in Infancy***

Dr Susan Imrie

9<sup>th</sup>, 13<sup>th</sup>, 16<sup>th</sup> November

#### *Outline*

Infancy is a period characterised by rapid change, growth and development, but which factors shape and influence this process? What skills do infants bring to social interactions? How do parents influence infant play, cognition and social development? This lecture series will examine social and cognitive development



during infancy, with a focus on infants' capacities and limitations in early social interactions, the influence of parents on infant development, and the formation of attachment relationships and their relation to later social and cognitive outcomes.

### *Recommended Reading*

Bornstein, M. H., Arterberry, M. E. & Lamb, M. E. (2014). *Development in Infancy: A Contemporary Introduction* (5<sup>th</sup> edition). New York: Psychology Press. Chapters 11 and 12.

Bremner, G. & Wachs, T. D. (2010). *The Wiley-Blackwell Handbook of Infant Development* (2<sup>nd</sup> edition). Oxford, UK: Wiley-Blackwell

Cooper, R. P. & Aslin, R. N. (1990). Preferences for infant-directed speech in the first month after birth. *Child Development*, 61(5), 1584-1595.

Groh, A. M., Fearon, R. M. P., van IJzendoorn, M. H., Bakermans-Kranenburg, M. J. & Roisman, G. I. (2017). Attachment in the early life course: meta-analytic evidence for its role in socioemotional development. *Child Development Perspectives*, 11(1), 7-76.

Mangelsdorf, S. C. & Frosch, C. (1999). Temperament and attachment: One construct or two? *Advances in Child Development and Behavior*, 27, 181-220.

Rothbart, M. K. (2007). Temperament, development, and personality, *Current Directions in Psychological Science*, 16(4), 207-212.

Steele, H., & Steele, M. (2013). Parenting matters: An attachment perspective. In L. McClain & D. Cere (Eds.), *What is parenthood? Contemporary Debates about the Family* (pp. 214–236). New York University Press.

White, B. L. & Castle, P. W. (1964). Visual exploratory behavior following postnatal handling of human infants. *Perceptual and Motor Skills*, 18, 497-502.

### *Suggested supervision essay titles*

- In what ways do babies seem equipped to master the world they encounter after birth and how do their experiences promote their further development?
- What are three factors that might affect the quality of interactions between parents and infants?
- Does attachment quality depend on the mother?
- When examining attachment, is it necessary to consider temperament?

### **Constructing Social Reality: Perception of faces**

Professor John Mollon

20<sup>th</sup>, 23<sup>rd</sup> November

### *Outline*

Crucial to our social interaction is our ability to identify and remember faces; and crucial to our understanding of the emotional states of others is our ability to recognise facial expressions. Have special brain mechanisms evolved for these purposes? Are some people innately better at face recognition than others? The topic of face perception will be used to illustrate several of the techniques that are used by experimental psychologists to study perception in general.

### *Recommended Reading (All items are available online)*

Bruce, V. and Young, A. (2012) *Face Perception*, Psychology Press, esp pp 31-95.

Wilmer, J. B. et al. (2010) Human face recognition ability is specific and highly heritable. *Proceedings of the National Academy USA*, 107, 5238-5241

- Young, A. W. and Burton, A. M. (2017) Recognizing faces. *Current Directions in Psychological Science*, 26, 212-217
- Reid, V. M. et al. (2017) The human fetus preferentially engages with face-like visual stimuli. *Current Biology*, 27, 1825-28
- Sadagopan, S (2017) A causal relationship between face-patch activity and face-detection behavior. *eLIFE*, 6. e18558
- Webster, M. A. and MacLeod, D. I. A. (2011) Visual adaptation and face perception. *Philosophical Transactions of the Royal Society B*, 366, 1702-1725

*Suggested supervision essay titles*

- Do we have dedicated brain mechanisms for the recognition of faces?
- What is the evidence that individual differences in the ability to recognise faces are heritable?
- What is known of the processes underlying the recognition of faces? Are they different from those underlying the recognition of other objects?
- Illustrate the different experimental techniques that can be used to study the perception of faces.

**Constructing Social Reality: Social Cognition**

Dr Jane Garrison

27<sup>th</sup> November

*Outline*

This lecture will explore the brain areas and cognitive mechanisms thought to underlie our recognition of ourselves. It will focus on a cognitive neuroscientific perspective (studying the neural basis of cognition), and a cognitive neuropsychological perspective (investigating the cognitive effects of brain injury or neurological illness).

Note: I recommend use of Mango as a brain visualisation tool to help orientate yourself with the different labels and coordinate systems referred to in the lecture. Mango is freely available for download from <http://ric.uthscsa.edu/mango/>. [Select a sample image from the 'Open' menu, then choose an MNI Brain Atlas from the Image/World view (Globe) menu].

*Recommended Reading (All items are available online)*

- Blakemore, S. J., Wolpert, D. M., & Frith, C. D. (2002). Abnormalities in the awareness of action. *Trends in Cognitive Sciences*, 6(6), 237–242.
- Northoff, G., & Bermpohl, F. (2004). Cortical midline structures and the self. *Trends in Cognitive Sciences*, 8(3), 102–107.
- Simons, J. S., Garrison, J. R., & Johnson, M. K. (2017). Brain Mechanisms of Reality Monitoring. *Trends in Cognitive Sciences*, 1669, 1–12.

*Additional Reading (All items are available online)*

Blakemore, S.-J., Wolpert, D., & Frith, C. (2000). Why can't you tickle yourself? *NeuroReport*, 11(11), R11–R16.

D'Argembeau, A., Ruby, P., Collette, F., Degueldre, C., Balteau, E., Luxen, A., ... Salmon, E. (2007). Distinct Regions of the Medial Prefrontal Cortex Are Associated

- with Self-referential Processing and Perspective Taking. *Journal of Cognitive Neuroscience*, 19(6), 935–944.
- Davey, C. G., Pujol, J., & Harrison, B. J. (2016). Mapping the self in the brain's default mode network. *NeuroImage*, 132, 390–397.
- David, N., Newen, A., & Vogeley, K. (2008). The “sense of agency” and its underlying cognitive and neural mechanisms. *Consciousness and Cognition*, 17(2), 523–534.
- Haggard, P. (2017). Sense of agency in the human brain. *Nature Reviews Neuroscience*, 18(4), 196–207.
- Hu, C., Di, X., Eickhoff, S. B., Zhang, M., Peng, K., Guo, H., & Sui, J. (2016). Distinct and common aspects of physical and psychological self-representation in the brain: A meta-analysis of self-bias in facial and self-referential judgements. *Neuroscience & Biobehavioral Reviews*, 61, 197–207.
- Johnson, M. K., & Raye, C. L. (1981). Reality monitoring. *Psychological Review*, 88(1), 67–85.
- Northoff, G., Heinzl, A., de Greck, M., Bermpohl, F., Dobrowolny, H., & Panksepp, J. (2006). Self-referential processing in our brain - A meta-analysis of imaging studies on the self. *NeuroImage*, 31(1), 440–457.
- Qin, P., & Northoff, G. (2011). How is our self related to midline regions and the default-mode network? *NeuroImage*, 57(3), 1221–1233.
- Tsakiris, M., Longo, M. R., & Haggard, P. (2010). Having a body versus moving your body: Neural signatures of agency and body-ownership. *Neuropsychologia*, 48(9), 2740–2749.

#### *Suggested supervision essay titles*

- What is understood about the mechanisms by which we distinguish between real and imagined information? Which areas of the brain are implicated in these processes?
- What techniques have been used to investigate the neurological basis of self-recognition and what are their limitations in terms of improving our understanding of this subject?

#### **Constructing Social Reality: Discussion of the Topic**

Dr S Imrie, Prof J Mollon and Dr J Garrison,  
30<sup>th</sup> November

This will be a live session delivered on-line.

### **Topic 3 – Mind and Body**

The question of the relationship between mind and body, or psychological states and bodily states is pervasive throughout psychology. You have already encountered this question in the context of emotions and reasoning. No psychologist today would dispute the fact that mental states, cognitive processes, thoughts and intuitions reside in the brain. But it is not easy to understand how a pattern of neural firing *is* the same thing as the content of a thought, such as “I believe it is 2020”. A good illustration of the conundrum (how can mental entities be physical and vice versa?) is the placebo effect, where the belief that “taking X will make me better” results in

faster recovery from illness, despite X containing no nutritional or medicinal properties. In the lectures on Mind and Body, you will encounter questions that require reference to both psychological and physical states for explanation. The three lectures on Emotion will demonstrate the complexity of the relationship between mental and physical states and the need to appeal to cross-cultural, experimental and social psychological approaches to elucidate the nature of emotions. The study of abnormal psychology demonstrates that a clear relationship holds between mental experience and neural substrate: increasingly sophisticated techniques in neural measurement have begun to reveal significant differences in neurotransmitter systems, connectivity networks and neural region activation in disorders of mental health. But how far can neurocognitive theories and findings account for the nature of mental experiences of a psychiatric disorder? This is a question you could discuss in supervisions in the context of the four lectures on Mental Health.

### ***Mind and Body - Emotion***

Dr Simone Schnall

22<sup>nd</sup>, 25<sup>th</sup> and 29<sup>th</sup> of January.

#### *Outline*

What is an emotion? Psychological researchers have pondered this question ever since William James asked it in the title of his article published in 1884. The current lectures will review contemporary research addressing a number of issues within the broad themes of affect, emotion and mood. In particular, we will examine multiple perspectives on emotions, including the universality of emotion, prototype approaches, and appraisal theories of emotions. We will also explore the relationship between cognition and emotion, and the extent to which cognitions are a prerequisite for emotional experiences, and on the flip side, the extent to which emotions influence cognitive processes. Overall, the lectures will illustrate that although emotional experiences sometimes seem to disturb everyday functioning, recent research has demonstrated that many emotions have adaptive consequences.

#### *Recommended Readings: (All articles are available on line)*

Barrett, L. F., Mesquita, B., Ochsner, K. N., & Gross, J. J. (2007). The experience of emotion. *Annual Review of Psychology*, *58*, 373-403.

Gross, J.J. (2001). Emotion regulation in adulthood: Timing is everything. *Current Directions in Psychological Science*, *10*, 214-219.

Clore, G. L. & Huntsinger, J. R. (2007). How emotions inform judgment and regulate thought. *Trends in Cognitive Sciences*, *11*, 393-399.

Winkielman, P. & Berridge, K. C. (2004). Unconscious Emotion. *Current Directions in Psychological Science*, *13*, 120-123.

#### *Further Readings (All articles are available on line)*

Ekman, P. (1994). Strong evidence for universals in facial expressions: A reply to Russell's mistaken critique. *Psychological Bulletin*, *115*, 268-287.

Gasper, K. & Clore, G.L. (2002). Attending to the big picture: Mood and global vs. local processing of visual information. *Psychological Science*, *13*, 34-40.

Lazarus, R. S. (1982). Thoughts on the relation between emotion and cognition. *American Psychologist*, *37*, 1019-1024.

- Parkinson, B. (1997). Untangling the appraisal-emotion connection. *Personality and Social Psychology Review*, 1, 62-79.
- Russell, J. A. (1994). Is there universal recognition of emotion from facial expressions? A review of the cross-cultural studies. *Psychological Bulletin*, 115, 102-141.
- Shaver, P., Schwartz, J., Kirson, D., & O'Connor, C. (1987). Emotion knowledge: Further exploration of a prototype approach. *Journal of Personality and Social Psychology*, 52, 1061-1086.
- Schwarz, N., Bless, H., Strack, F., Klump, G., Rittenauer-Schattka, H., & Simons, A. (1991). Ease of retrieval as information: Another look at the availability heuristic. *Journal of Personality and Social Psychology*, 61, 195-202.
- Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology*, 45, 513-523.
- Schwarz, N., & Clore, G. L. (2003) Mood as information: 20 years later. *Psychological Inquiry*, 14, 296-303.
- Winkielman, P., Berridge, K. C., & Wilbarger, J. (2005). Unconscious affective reactions to masked happy versus angry faces influence consumption behavior and judgments of value. *Personality and Social Psychology Bulletin*, 1, 121-135.
- Zajonc, R. B. On the primacy of affect. *American Psychologist*, 39, 117-123.

*Suggested supervision essay titles:*

- Is it true that “Preferences need no inferences”?
- Are emotions universal?
- Does affect help or hinder with regard to cognitive processing?

### **Mind and Body – Mental Health**

Dr Kate Plaisted-Grant

1<sup>st</sup>, 5<sup>th</sup>, 8<sup>th</sup> and 1<sup>th</sup> February

These lectures on mental health will introduce you to some of the major psychiatric diagnostic categories, the mental experiences of those given these diagnoses and the genetic, neural and psychological theories that try to explain the emergence of each disorder. We will also examine the most common major pharmacological and psychological therapies and evaluate their efficacy. Finally, we will consider the origins of the categorical model of mental disorders and its limitations and review recent proposals that abnormal psychological states should be regarded as varying traits, on a continuum across the population. This proposal has some interesting implications for research in this area.

Recommended reading (*All items are available on line*)

Porter, R. (2002) *Madness: a brief history*. Oxford University Press

Ray, W.J. (2000) *Abnormal Psychology*. Sage Publications, inc.

Further reading for these lectures will be provided in the lecture handouts.

*Suggested supervision essay titles*

- How should research of abnormal psychology approach the issue of symptom heterogeneity seen in psychological disorders?
- Is schizophrenia best thought of as a syndrome?
- Why do some people develop anxiety disorder?

### **Mind and Body – Discussion of the Topic**

Dr Simone Schnall and Dr Kate Plaisted-Grant  
15<sup>th</sup> February

This will be a live session delivered on-line.

### **Topic 4 - Decision-Making**

Making good decisions is a goal we all strive for and is essential to wellbeing and success. It is also central to interpreting the world. Unfortunately the information upon which we are expected to make decisions is often uncertain, noisy and disorganised. It is therefore somewhat remarkable that we see patterns of similar decision making responses by people. But these patterns of decisions making are not always correct – far from it in fact. So why do people make similar errors in decision making? Can these errors inform us of the cognitive processes involved in decision making? For some decisions, the information available is subject to a number of distortions and biases. How, for example, do people make sense of the myriad of influences on political decision making to reach a ‘good decision’?

#### ***Decision making - Neuroscience of Decision Making***

Dr Deborah Talmi  
19<sup>th</sup> and 22<sup>nd</sup> February

#### *Outline*

Understanding how we make decisions is a central goal of cognitive psychology and neuroscience, whether as simple as deciding to scratch an itch or as complex as choosing a second-hand car. In these lectures we will explore the neuroscience of simple decisions. We will examine the neural pathways underlying reward and decision-making, what goes wrong when these areas are damaged, and how complex decisions can be made optimally based on imperfect information. We precede this discussion by an exploration of the age-old question of free will, and ask whether neuroscience can help us resolve the question of ‘who’ is making the decision.

#### *Recommended Reading*

Haggard P. (2017). [Sense of agency in the human brain](#). *Nature Reviews Neuroscience*, 18(4), 196-207

[Neuroeconomics : decision making and the brain](#) (2014). Edited by P. W. Glimcher & E. Fehr. Amsterdam; Boston: Elsevier/Academic Press.

Berridge KC, Kringelbach ML. (2015). [Pleasure systems in the brain](#). *Neuron*, 86(3), 646-64.

Wolpert DM, & Ghahramani Z. (2005). [Bayes rule in perception, action and cognition](#). *Oxford Companion to Consciousness*.

Kahneman D. (2011). [Thinking, Fast and Slow](#). Macmillan.

*Suggested supervision essay titles*

- What can neuroscience experiments tell us about free will?
- Does the brain represent the parameters of expected utility theory?
- 

**Decision Making – Political decision making**

Dr Lee de-Wit

26<sup>th</sup> February, 1<sup>st</sup> March, 5<sup>th</sup> March, 8<sup>th</sup> March, 12<sup>th</sup> March

*Outline*

One of the most important decisions we make in life is political – who should we vote for? For decades psychology has been helping us to understand how we make political decisions, and has revealed (perhaps surprising) individual differences associated with the decision to identify with one political party or another.

Experimental research has also revealed a range of potential biases that complicate, or perhaps even undermine the democratic process, from the influence of the perceived competence of the face of different candidates, to the order of candidates on the ballot paper.

This series of lectures will question whether we make rational political decisions. Perhaps more critically it will explore whether reason (or emotions or morality) dominate our political decisions, and whether the dichotomy between reason and emotion is a false one. In particular it will explore the individual differences that might cause people to emphasize different moral values in voting one way or another, and the way in which those differences might have been shaped by evolution or culture. It will also explore how findings theories and tasks from cognitive science can help us to understand how people form their political beliefs.

In recent years, there has also been an increasing recognition that policy makers can make the most of (perhaps exploit...) the biases and heuristics (and morals and emotions) in human reasoning to 'nudge' people into making 'desirable' decisions. This recognition has manifested in the UK in the development of the Behaviour Insight Team, and the fact that one will now find a 'behavioural scientist' in almost every department in Whitehall. This series will end by considering whether policy makers can use psychological theories and research methods to nudge our decisions 'for good'.

*Recommended Reading*

De-Wit, L. H. (2017). *What's Your Bias?: The Surprising Science of Why We Vote the Way We Do*. London: Elliot and Thompson.

Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. Vintage.

Thaler, R., & Sunstein, C. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Penguin.

*Further Reading (All articles are online)*

- Ballew, C. C., & Todorov, A. (2007). Predicting political elections from rapid and unreflective face judgments. *Proceedings of the National Academy of Sciences*, 104(46), 17948-17953.
- Duarte, J. L., Crawford, J. T., Stern, C., Haidt, J., Jussim, L., & Tetlock, P. E. (2015). Political diversity will improve social psychological science. *Behavioral and Brain Sciences*, 38, e130.
- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of personality and social psychology*, 96(5), 1029.
- Herrmann, E., Call, J., Hernández-Lloreda, M. V., Hare, B., & Tomasello, M. (2007). Humans have evolved specialized skills of social cognition: The cultural intelligence hypothesis. *Science*, 317(5843), 1360-1366.
- Hussak, L. J., & Cimpian, A. (2018). Investigating the origins of political views: Biases in explanation predict conservative attitudes in children and adults. *Developmental Science*, 21(3), e12567.
- Nickerson, D. W., & Rogers, T. (2010). Do you have a voting plan? Implementation intentions, voter turnout, and organic plan making. *Psychological Science*, 21(2), 194-199.
- Rollwage, M., Zmigrod, L., de-Wit, L., Dolan, R. J., & Fleming, S. M. (2019). What Underlies Political Polarization? A Manifesto for Computational Political Psychology. *Trends in Cognitive Sciences*, 23(10), 820-822.
- Schäfer, M., Haun, D. B., & Tomasello, M. (2015). Fair is not fair everywhere. *Psychological science*, 26, 1252-1260.
- Starmans, C., Sheskin, M., & Bloom, P. (2017). Why people prefer unequal societies. *Nature Human Behaviour*, 1, 0082.
- Tannenbaum, D., Fox, C. R., & Rogers, T. (2017). On the misplaced politics of behavioural policy interventions. *Nature Human Behaviour*, 1(7), 0130.

#### *Suggested supervision essay titles*

- Are political decisions essentially moral decisions?
- Are emotions information in political decision making?
- Can social psychology explain why politics can be so polarizing?
- Can psychological research enable policy makers to 'nudge for good'?

#### **Decision-Making – Discussion of the Topic**

Dr D Talmi and Dr L de-Wit

15<sup>th</sup> March

This will be a live session delivered on-line.