PBS10 for the Academic Year 2016/2017

Gender development: biological, psychological and clinical perspectives
Course Organiser: Professor Melissa Hines

Lecturers:

Professor Melissa Hines, Psychology, University of Cambridge
Dr. Carlo Acerini, Paediatrics, University of Cambridge
Dr. Miha Constantinescu, Psychology, University of Cambridge
Professor Robert Foley, Archaeology & Anthropology, University of Cambridge
Dr. Juliet Foster, Psychology, University of Cambridge
Mr. Tim Kung, Psychology, University of Cambridge
Dr. Vickie Pasterski, Paediatrics and Psychology, University of Cambridge
Dr. Debra Spencer, Psychology, University of Cambridge
Dr. Denes Szucs, Psychology, University of Cambridge

Exam: There will be one three-hour unseen exam at the end of the year. Students will be required to answer three essay questions from an undivided list. Students from a tripos other than PBS might wish to note and consider that this type of exam might not be familiar to them.

Workload: Students should expect to devote 10 to 12 hours a week to this course during term time.

Required Text:

Additional Texts:

Michaelmas Term: Wednesdays 14:00-16:00

Week 1: Prof Hines. Sex differences and sexual differentiation: How do human males and females differ psychologically and how large and reliable are the differences? How do genetic factors and gonadal hormones influence physical development as male, female or in-between? Might similar genetic or hormonal mechanisms play a role in human neural and behavioural development?

Required reading:

**Additional reading (overviews):**


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**Week 2:** Dr. Spencer. *Social and cognitive-developmental perspectives on gender.* How does the postnatal environment influence gender development?

**Required reading:**


**Additional Reading:**


**Essay questions:**

1. Is the behaviour of men and women, or girls and boys, similar or different?
2. Are genetic, hormonal, learning and cognitive theories of gender development mutually exclusive?

**Week 3:** Dr. Foster. *The Social Construction of Gender*. The cultural and constructed character of gender categories, and their influence on psychological processes. Social representations as an example of a social constructionist theory.

This lecture will consider the theoretical perspective of social constructionism, which holds that we communally make sense of the world around us, and that these ideas can become taken-for-granted and accepted as fact. The communication of these constructions is often a key issue for theorists within this area. Many social constructionists have examined gender as an example of a social construction, and we will consider the evidence for this, and its implications, across the lifespan from birth through to adulthood. We will also consider how constructionism relates to other theories.

**Readings:** (* indicates key readings)


Useful campaign websites
http://www.achilleseffect.com/
http://www.lettoysbetoys.org.uk/
http://www.pinkstinks.co.uk/

Suggested Essay Titles
1. In what ways do social representations of gender influence children’s communications with their peers?
2. From a social psychological perspective, the only differences between men and women which need to be considered are the beliefs which people hold about men and women. Discuss.

Week 4: Dr. Constantinescu. Hormones and gendered behaviour in infancy. Gender differences in behaviour begin to emerge during the first year of life. This lecture provides a critical review of what is known about the nature and consistency of these early emerging gender differences in behaviour. It also discusses methods for measuring the hormone environment and relating hormones to behaviour during early development.

Required reading:
Additional reading:

Suggested Essay Title:
How early do gender differences in human behaviour appear, and what does this tell us about their origins?

Week 5: Prof Hines. Hormonal influences on behaviour in childhood.

Required reading:

Additional Reading:


**Essay Questions:**

1. Why do girls and boys play with different toys?
2. To what extent can parents determine the toys their children play with?

**Week 6:** Dr. Acerini. *Disorders of sex development (DSD, formerly known as intersex conditions): Clinical issues in treating individuals with DSD. Part 1.* Children born with ambiguous genitalia raise some difficult issues for medical professionals and parents. Must a gender be assigned as soon as possible and, if so, should surgery be conducted in infancy to make the genitalia accord with that gender? In this session, questions about sex assignment, ethics, consent and cultural influences will be raised.

**Required reading:**

**Week 7: Lecture 1. Mr Kung. Consequences of Childhood Gender-Typed Play.** Boys and girls play differently and they spend much of their time playing in early years. Although much research has looked at the factors that contribute to gender-typed play, relatively less attention has been paid to its consequences. Does gender-typed play have any long-term implications? Can a child's toy, activity, and playmate preferences shape their subsequent development?

This lecture will first provide a brief overview on developmental trends of gender-typed play. Subsequently, research findings on the relationships of gender-typed play to cognitive, social, and psychosexual development will be discussed, with particular focus on spatial abilities, physical aggression, and sexual orientation. Theoretical perspectives that address the influences of gender-typed play on these developmental outcomes will also be considered.

**Required reading:**

**Additional reading:**

**Essay titles:**
1. Discuss the relationship between early play experience and subsequent gender development.
2. Which developmental outcome is most strongly related to childhood gender-typed play?

**Week 7: Lecture 2.** Prof Hines. *Gender identity and sexual orientation*. These important gender related outcomes show substantial variability from one individual to another. This lecture addresses the nature of this variability, how it can be measured, and what might cause it.

**Required reading:**

**Additional reading:**


**Essay questions:**

1. Should gender identity disorder be a psychiatric diagnosis?
2. Can sexual orientation change?

**Week 8:** Dr. Pasterski. *Clinical issues in treating individuals with DSD: Part 2*. DSDs raise additional issues of disclosure. When and how should a child be told about the DSD? Is it difficult for a phenotypic female to come to terms with the information that she has a Y chromosome?

**Additional Reading:**


**Essay Questions:**

1. Is it important that children born with ambiguous genitalia be sex assigned as soon as possible after birth?
2. What causes variability in gender identity in individuals with disorders of sex development?

**Lent Term: Wednesdays 14:00-16:00**

**Week 9:** Prof Foley. *Evolutionary perspectives on sex and gender*. Reproduction through the fusion of two gametes - sexual reproduction - is a widespread phenomenon in the living world, and has evolved many times. As a result, evolutionary biologists have long taken an interest why it occurs, and its costs and benefits. Darwin himself recognised that different sexes had different interests, and that this shaped evolutionary processes to such an extent that he referred to 'sexual selection'. Species vary in how sex is determined, in the extent to which they are sexually dimorphic, and in the mating and parenting strategies they pursue. Humans, in that context, are part of the spectrum of evolutionary variation. As a hyper-social and cultural organism, they also display unique aspects.

This lecture gives a broad overview of sex and gender from an evolutionary perspective. Although it is widely accepted that humans have evolved through natural selection, and that the basics of our sex differences, reproductive patterns and development are not substantially different from other mammals, the evolutionary analysis of human sexual differences is often controversial. This paradox is normally resolved by contrasting sex and gender. Sex is the biological difference between males and females, gender is the differences that are socially constructed. The problem is, where does the former end and the latter start?

*Lecture outline:*

Why did sex evolve?
What is the ‘ecology’ of males and females?
What are the correlates in terms of behaviour, reproductive strategy and life history of ‘being male’ and ‘being female’?
What do we know of primate sexual behaviour, reproduction and social life?
What we know about the evolution of human sexual dimorphism (or the lack of it) and reproductive strategies?
Is there a ‘natural’ human social organisation in respect to males and females – monogamy? polygamy?– or in male and female behaviour?
Does evolutionary biology throw any light on the behaviour or men and women today?

**Some reading:**


Nettle, D. 2009. Evolution and genetics for psychology. Oxford University Press. **See Chapter 6 for a good and up to date review of sex in evolutionary biology, and some implications for humans.**


**Essay Questions:**
1. What light does the comparative study of sex throw on human behaviour?
2. Differences and similarities in the behaviours of men and women are the product of evolutionary processes. Discuss.

**Week 10:** Dr Pasterski. *Gender development later in the life span (men and women after age 40).* A great deal of psychological research has focused on development in childhood. There is much less emphasis on how people develop toward the other end of the lifespan. As we live in a society where people will live longer and be expected to work for longer, understanding psychological development at different life stages will become ever more critical. This lecture focuses on development from middle age onwards and discusses our attitudes to aging and whether there are differences between the genders in terms of identity, social networks, emotional responses, and personality development. It also considers the impact of changing hormones in later life.

**Some readings:**


**Essay questions:**

1. We live in a culture that disparages older people and that values youth and appearance. This has a more negative impact on women than men. Discuss.
2. In what way does age stereotyping affect men and women?
3. Is it true that hormonal changes in midlife have a greater impact on women than men?
Week 11: Lecture 1. Dr. Spencer. *Environmental influences on aggression*. Research has found a consistent sex difference, favouring males, in the use of physical aggression. This lecture will explore the possibility that this important sex difference is influenced by individuals’ temperamental characteristics, upbringing, and experiences.

**Required reading:**

**Additional reading:**


Week 11: Lecture 2. Prof Hines. Androgen and aggression. It is widely assumed that androgen promotes aggression and that this explains why males are more physically aggressive than females. However, studies correlating androgen levels in adults with aggressive behaviour have not shown consistent relationships, and studies where androgen is manipulated in men also have generally not shown increased aggression. There is some evidence, however, that androgen levels prenatally may contribute to aggressive behaviour postnatally.

Required reading:

Additional reading:


**Essay titles:**
1. Why do boys appear to be more aggressive than girls?
2. What is the relationship between androgen and aggression in men?

**Week 12:** Prof Hines. *Cognitive abilities.* There are sex differences in some specific cognitive abilities. This lecture evaluates the evidence regarding the causes of these sex differences.

**Required reading:**

**Additional reading:**


**Week 13: Lecture 1.** Dr Szucs. *A gender gap in academic anxiety: the example of mathematics anxiety.* The lecture will examine the complex interplay of cognitive and emotional factors and gender through the example of mathematics anxiety. Mathematics anxiety is a debilitating emotional reaction to mathematics. It is clearly distinguishable from general anxiety and it ranges from a feeling of mild tension to experiencing a strong fear of mathematics. Mathematics anxiety may generalize to various situations with the consequence that otherwise perfectly intelligent and capable persons develop a severe avoidance of situations involving any kinds of mathematics and do not choose careers involving the application of mathematics. Several studies have now established that women demonstrate much higher levels of maths anxiety than men which can adversely affect their career choices. The lecture will review the demography of mathematics anxiety, its potential underlying causes, its cognitive consequences and potential intervention methods.

**Recommended Reading:**

**Suggested essay titles:**

1. Is there a gender gap in mathematics anxiety?

**Week 13: Lecture 2.** Prof. Hines. *Gender and the Brain*. Images of the brain are seductive and increase the persuasiveness of arguments suggesting that psychological and behavioural differences between men and women are inborn. Should they?

**Required reading:**

**Additional reading:**


**Essay titles:**
1. What value is added to behavioural studies by the addition of brain images?
2. How do male and female brains differ?

**Week 14: Prof Hines.** *Gender segregation in work, including parenting.* Why are there more men than women professors in maths and the physical sciences? Why are there more female than male elementary school teachers? Why do women do more childcare and housework than men do? Why are there more men than women at the top of most professions? What factors influence interest in parenting? Do males and females differ in parenting ability? Looking at the same evidence, different scientists have reached different conclusions. This week we will try to find out why.

**Required reading:**
- ‘Vital Statistics: Girls are becoming as good as boys at mathematics, and are still better at reading’ (2008) *The Economist*, May 29th. And associated readers’ comments.

**Additional Reading:**
Week 15. Dr Spencer and Dr Constantinescu. Gender and psychopathology. Processes of sexual differentiation might be involved in the development of psychological disorders that are more prevalent in one sex or the other. Such disorders include depression, obsessive compulsive disorder (OCD), Tourette syndrome (TS), conduct disorder, dyslexia, autistic spectrum conditions and paraphilias. In addition, for some psychological disorders, there are sex differences in age of onset or in severity. Here we talk about sex differences in disorders and begin to discuss why psychological disorders might differ for males and females, as well as how studying sex differences might help prevent disorders in both males and females.

Reading:


**Essay questions:**
1. Does testosterone cause autistic spectrum conditions?
2. Why do females appear to be more likely than males are to develop eating disorders?
3. Why do more women than men seek help for depression?

**Week. 16:** Prof Hines. *Sex, gender, genes, hormones, experience, the brain and behaviour. How does it fit together?* Debates surrounding gender development are often conceptualized as ‘nature’ versus ‘nurture’, ‘biology’ versus ‘culture’, ‘innate’ versus ‘learned’. However, gender development, like other aspects of human development, is best conceptualized as a developmental system, with different types of factors exerting influences by interacting over time. Current research directions in gender development include the beginnings of developmental systems approaches, studies of infancy and adolescence as periods of relatively dramatic brain re-organization, and studies of epigenetic factors involved in gender development.

**Required Reading:**


**Additional Reading:**


Essay Question:
What could a developmental systems perspective contribute to understanding gender development?