

UNIVERSITY OF SUSSEX SCHOOL OF PSYCHOLOGY

NATURE AND NURTURE OF MENTAL HEALTH

(C8896)



Most of the questions you need answers to about this module are in this document. Please read it fully and carefully before your first class. This document concerns the structure and content of the module. If you have questions about procedures, please consult the School of Psychology Office in person (Pev1 2A13) or via psychology@sussex.ac.uk

MODULE CONTENT AND STRUCTURE

The aim of this module is to introduce you to the research of nature and nurture of mental health, a highly interdisciplinary and fast-moving field. You will learn key principles as well as historical aspects of research of nature and nurture of mental health. More recent developments in this field will also be explored, focusing on a broad range of mental health phenotypes across the life span. For example, you will have the opportunity to learn about nature and nurture of neurodevelopmental psychopathology (e.g., autism), common mental health problems (e.g., depression, anxiety), and mental ageing (e.g., dementia). Ethical issues related to genetically informative human and animal studies of mental health will also be discussed.

Outline of module content:

| | Topics |
|----|--|
| 1 | Introduction. Why to study nature and nurture? |
| 2 | DNA, genes and genome |
| 3 | What we can learn about mental health from adoption and twin studies |
| 4 | How DNA variations can influence mental health |
| 5 | Genes and the environment: gene-environment correlation |
| 6 | Genes and the environment: gene-environment interaction |
| 7 | Genes and the environment: epigenetics |
| 8 | From genes to brain to mental health |
| 9 | Animal models in mental health research |
| 10 | Nature and nurture of adult mental health |
| 11 | Ethical and societal issues |

Note: The module outline is not a timetable. You need to see the module website on the Study Direct for the scheduled sessions. There may be some adjustments to the original schedule depending on our progress and your feedback. Any changes will be notified during class time and on the Study Direct site.

By the end of the module you should be able to:

LO1. Appreciate the role of nature and nurture in the aetiology of mental health;

LO2. Demonstrate familiarity with genetically-informative research methods and contemporary research of nature-nurture co-action in mental health;

LO3. Discuss ethical issues of studying nature and nurture of mental health in humans and animals;

LO4. Communicate knowledge of key concepts and developments in research of nature and nurture in mental health both orally and in written form.

GETTING HELP

Study Direct: Any queries about this module that are not covered by this handbook (please check first!) can be posted on the Study Direct forum. In this way, my responses can help any other students who may have similar questions.
Module convenor: Private queries can be directed to me (Darya Gaysina) during student feedback sessions (see times posted on Psychology Web Pages) in 2C8 (Pevensey 1 Building), by phone (x7975) or email (<u>d.gaysina@sussex.ac.uk</u>).

TEACHING FORMAT

There will be 11 **2-hour sessions**, on Mondays (9-11am) in Ashdown House (AH) 102. There is no session at week 12 because of the Early May bank holiday. The purpose of the sessions is to supplement the reading material in providing an overview of existing research on each topic. Note, that the first hour of each session will be in the format of the lecture, and the 2nd hour – in the form of general discussion. These sessions are not a substitute for reading the core, essential and recommended material.

The materials for each session will be posted on Study Direct at least one week before. You will be expected to come to the sessions having read the assigned material and be prepared to make comments, raise questions, and offer opinions on the comments of others. These discussions are designed to support development of independent thinking and the skills needed to evaluate relevant literature. **Please**, **try to attend each session** to get the maximum benefit.

FACULTY

The sessions are run by Darya Gaysina (unless specified on Study Direct). I usually invite one or two guest lecturers to talk about specific areas of nature and nurture research. In the past, the guest lectures for the module were Dr Sarah King (addiction) and Prof Gordon Harold (child psychopathology). You will be notified about the guest speakers in advance.

READING

Core textbook:

Plomin, R., DeFries, J. C., Knopik, V. S., & Neiderhiser, J. M. (2012). Behavioral genetics (6th edition). New York: Worth.

An earlier edition of this textbook is also acceptable:

Plomin, R., DeFries, J.C., McClearn, G.E., & McGuffin, P. (2008). Behavioural

Genetics (5th ed). New York, Worth.

Additional reading:

Rutter, M. (2005). Genes and behaviour. Oxford, Blackwell.

Flint, J., Greenspan R.J., & Kendler, K.S. (2010). How genes influence behavior.

Oxford University Press.

Kovas, Y., Malykh, S., Gaysina. D. (2016). Behavioural genetics for education.

Pallgrave Macmillan.

Essential reading for each session:

Reading lists for each session will include a number of primary research publications. These references will be available via the University eLibrary and the Study Direct website.

ASSESSMENT

Assessment mode for the module is 100% <u>Coursework</u> including four elements:

Tests (Quizzes) (10% of your mark): There will be three quizzes (tests) in total with 10 MCQs in each. The results of the best two (5% each) will be used for a final grade. The tests will be available on the Study Direct (quizzes) in weeks 4, 7 and 10; you will have five days (Monday 9am - Friday 5pm) the same week to complete it. **Project (Research Blog) (30% of your mark):** You will write for the Blog (Journal) on the Study Direct. The topics for the Blog will be introduced on a weekly basis. You will need to provide your opinion (150-200 words maximum) on each topic in your Blog. In total, there should be 10 records in your Blog summing up to 1500-2000 words. The entire journal (Blog) should be submitted in PDF format for assessment at the end of the module (week 12). For this coursework, you should demonstrate ability to critically evaluate material covered in sessions and recommended readings.

Group Presentation (30% of your mark): Every week (weeks 2-11), a group of students will present a scientific paper on a specific topic. You will need to subscribe to the specific topic you want to work on. The list of topics will be available at the first session (week 1). For the presentation, a working group will need to read the suggested paper in advance and prepare the outline of this paper using the PowerPoint slides. The presentation should be 10 minutes. Afterwards, there will be a general class discussion of the paper for 10 minutes.

Essay (30% or your mark): A written answer (2000 words) to an open ended question relevant to a specific mental health problem should be based on reading of three research papers. The essay questions with the relevant references and instructions will be published on the Study Direct at week 3, with the essay due in week 10.

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ASSESSMENT INFORMATION

Assessments deadlines and methods of submission can be found on your assessment timetable via Sussex Direct.

Information on the following can be found at the link below:

- Submitting your work
- Missing a deadline
- Late penalties
- Exceptional circumstances
- Exams
- Help with managing your studies and competing your work
- Assessment Criteria

http://www.sussex.ac.uk/psychology/internal/students/examinationsandassessment

FEEDBACK

There will be a lot of opportunity for you to get feedback on your study progress during the module.

First, **during each session** you will have an opportunity to receive informal feedback from your peers as well as from the module convenor on your ability to critically evaluate the research designs and findings, and to communicate your ideas effectively.

Second, you will receive some informal feedback on you knowledge of the key concepts and terminology through the **quizzes** that will be available on the Study Direct (every four weeks).

Third, the formal written feedback will be provided by the module convenor on your other coursework elements - **presentation**, **blog and essay**.

ATTENDANCE, ABSENCE AND ENGAGEMENT

You are expected to be 'in attendance' at the University for the full duration of the published term dates for your course of study. That means you should be regularly attending lectures, seminars, labs etc. and committing time to your studies to be in a position to comply with academic and administrative expectations.

The university has an 80% attendance policy in place, so it's really important that you let us know if you are ill or cannot attend classes so that we can register this as a notified absence.

If you are unable to attend your seminars or workshops, you need to send an email to <u>psychologyabsence@sussex.ac.uk</u> setting out the following information:

- Seminar(s) / workshop(s) that you will be absent from (list all of them)

- Tutor name
- Brief reason for absence

Please see the following link for further information:

http://www.sussex.ac.uk/psychology/internal/students/attendance