Psychology

Example Course
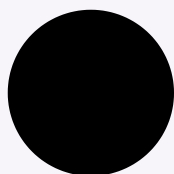
Course Outline

The structure of the compulsory modules is based on the structure of the undergraduate psychology course at Oxford University: Social Psychology, Developmental Psychology,Cognitive Psychology, and Neuroscience. Most modules will focus on experimental debates, where there have been contradictory or conflicting findings from different studies. Being able to critically evaluate experiments and understand how we get contradictory results is a crucial part of every experimental psychology course, and will likely come up at interviews.

1. Introduction to Social Psychology

Topic 1: Group Identity
In this topic, we will look at the classic studies regarding the formation of group identities, and prejudice toward out-groups.

Concepts:
- Outgroup homogeneity: the failure to see differences between members of out-group
- In-group favouritism: People are more likely to help members of the in-group; However, the boundaries of the 'in-group' are malleable (see football team experiment; Levine et al., 2005).
- Theories related to Group identity.
- Cognitive miser hypothesis: the idea that we form stereotypes to simplify social perception (e.g. Macrae et al., 1994).
- Positive Social Identity theory (Tajfel, 1978): the idea that we show prejudice toward the out-group in order to maintain a positive image of our own group.

Studies
- i. Sherif et al. Summer Camp Studies (1961)
- ii. Tajfel's Minimal Group Paradigm (1969)
- iii. In-Group Favouritism (Levine et al. 2005): Football team experiment
- iv. Neuroscience evidence for Positive Social Identity theory (Volz et al. 2009)

Topic 2: Pro-Social Behaviour (Altruism)
This topic will be centred around the debate between the negative-state relief hypothesis (that altruism is always egotistical) and the empathy altruism hypothesis (that there can be genuine empathetic concern which drives behaviour). It will also cover recent neuroscientific developments to the theories.

Concepts:
- Negative State Relief Hypothesis (Cialdini & Kenrick, 1976).
- Empathy Altruism Hypothesis (Batson et al., 1981).
- Neuroscience evidence.

Studies:
- i. Social learning of altruism (Cialdini & Kenrick, 1976).
- ii. Evidence of true empathy (Batson et al., 1981).
- iii. Neural evidence for distinct networks for personal distress and empathetic concern (Decety & Lamm (2006).
- iv. Neural.

Topic 3: Critical thinking
The replication crisis in Social psychology and the concept of 'WEIRD' participants i.e. Data is typically collected from undergraduates in Western, Educated, Industrialized, Rich, Democratic societies (Henrich et al., 2010).

2. Introduction to Developmental Psychology

Topic 1: Theory of Mind

This topic focuses on the key stage of development where children learn to understand that other individuals have minds. We will look at the traditional view from Maxi tasks, which consistently finds that children fail to understand that other have minds at age 3, but succeed at age 4. We will then look at conflicting evidence from infant studies, where 15-month olds seem to pass implicit theory of mind tests. This topic will focus on the different methods used in developmental psychology for different ages, and critically evaluate these contradictory results.

Studies
- i. The original Maxi task shows that children learn to understand theory of mind between the age of 3 years and 4 years (Wimmer & Perner).
- ii. The violation of expectation paradigm shows that infants seem to pass implicit theory of mind tests at only 15-months old (Onishi & Baillargeon).
- How can we explain the conflicting results? Alternative explanations for Onishi and
- Baillargeon's findings (Heyes et al., 2014).
- Dual-system account (Apperly & Butterfill, 2009): there are two systems needed for theory of mind, which develop at different times.

3. Introduction to Cognitive Psychology

Topic 1: Attention

Students will be introduced to the central role that studies of attention have played in the history of psychology. Since humans have such limited processing capacities, a crucial role of the brain is to filter out which material should be processed, and which can be ignored. Students will be introduced to this idea through the fascinating studies of change blindness (where people fail to notice large changes happening right before their eyes), and in cases of neglect following stroke (where stroke patients fail to notice anything happening in the left side of their visual field).

Topic 2: Memory

This topic will focus on memory as being 'reconstructive'. In other words, a large part of memory is making sense of fragmented memory.

Concepts:
- Memory illusions: Errors in reconstructing memory reflect inherent biases (e.g. Branford & Franks, 1971).
- Efficient storage: it is unnecessary to store memory that is consistent with knowledge; so we only remember information that is 'surprising' in some way (Deese, 1959).

**Note this topic could give rise to many interesting experiments that students could easily do themselves as a later research project.
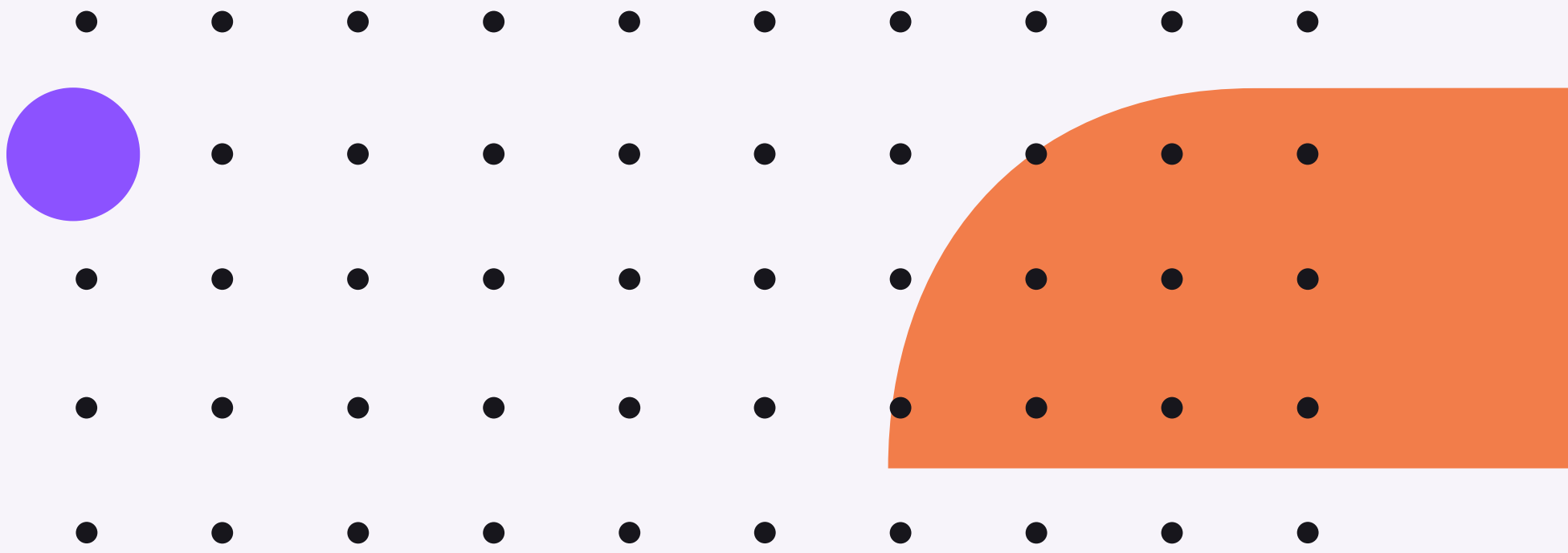
4. Short Introduction to Neuroscience

Topic 1: How do we learn about the brain?
In this topic, students will be introduced to neural research methods (lesion studies, fMRI, single cell recordings), and learn about basic neural areas along the way. For example, we will look at hippocampal lesion studies to show the importance of the hippocampus in memory, and learn about cellular action potentials in the context of single cell recordings.

Optional Modules

Social Psychology
In the social psychology optional modules, we will build on concepts previously learned in the compulsory modules in the context of more recent developments in social psychology, and how they fit into real-world policy decisions.

a) Solving Group Conflict:
This optional module will cover approaches to solving conflict between groups, and the real-world implications for policy. We will look in detail at the Contact Hypothesis (e.g. Brown & Hewstone, 2005), which aims to reduce prejudice toward groups by improving the quality and quantity of contact between members of conflicting groups. Various other theories and conflicting ideas will also be discussed, such as the importance of simultaneously maintaining distinctiveness between groups (Mutual Differentiation Model), and approaches which involve creating superordinate identities (Dual-Identity Hypothesis; Hornsey & Hogg, 2000). Finally, we will discuss the policy and structural implications of the different approaches (e.g. Dovidio et al., 2016).

b) Implicit cognition:
This optional module will look at how we can measure beliefs and cognition using behaviour rather than self-report. This is crucial not only when people are unwilling to state their true beliefs, but also in cases of unconscious belief. We will begin by looking at the notion of priming, where different cues can unconsciously affect behaviour. We will then look in detail at the Implicit Association test (IAT; Greenwald et al., 1998), which has lead to the notion of Implicit Bias (i.e. unconscious racism, sexism etc; e.g. Kurdi & Banaji, 2019.). We will discuss implications of the IAT for real-world policy, as well as limitations of the IAT (for example its predictive validity).

Cognitive Psychology
a) Reason and Rationality:
This topic will focus on the age old question, are humans rational? Students will learn about various common ways in which humans are systematically irrational (e.g. in our ability to use logic correctly, and in over-estimating our own abilities). We will then see how it could in fact be evolutionarily advantageous to be 'irrational' in these ways. This topic can be altered depending on what the student wants to know, but can include a discussion of Social Contract theory (Cosmides & Tooby, 1994) and of Bayesian reason (e.g. Chapter & Oaksford, 1999), depending on the students interests and level.

Neuroscience
a) Social Cognition: Are there areas of the brain which are specialised for social cognition?
This module will focus on the ongoing debate around the idea of a social brain. For example, are there areas of the brain which have evolved especially for looking at faces, or for feeling empathy with other humans, or are these skills using more general neural mechanisms? In this unit students will gain a deeper understanding of the notions of domain specificity and domain generality, and will learn to evaluate evidence for both sides of the debate.