PSY1011 – PSYCHOLOGY 1A SUMMER SEMESTER A, 2016

Week 1: Introduction

Week 2: Historical Timeline of Psychology

Week 3: Developmental Psychology 1

Week 4: Developmental Psychology 2

Week 5: Learning 1

Week 6: Learning 2

Week 7: Personality 1

Week 8: Personality 2

Week 9: Sensation & Perception 1

Week 10: Sensation & Perception 2

Week 11: Biological Psychology

Week 12: Cross-cultural Psychology

Week 1: Introduction

- *Define psychology*
- Explain how science can safeguard against the major fallacies of human thinking
- Describe the features of psychological pseudoscience, and distinguish it from psychological science
- Describe the reasons why we are drawn to pseudoscience
- *Identify the key features of scepticism*
- Explain the basic principles of scientific thinking

What is Psychology?

- Psychology: the scientific study of the mind, brain and behaviour
- Spans <u>multiple levels of analysis</u> with lower levels being tied most closely to biological influences and higher levels tied most closely to social influences. For example, depression can be examined at differing levels of explanation:
 - 1. Molecular level:
 - variations in genes that predispose to depression
 - 2. Neurochemical level:
 - differences in levels of the brain's chemical messengers that influence mood
 - 3. Neurological/physiological level:
 - differences in the size and functioning of brain structures related to mood
 - 4. Mental level:
 - depressed thoughts
 - sad feelings
 - ideas of suicide
 - 5. Behavioural level
 - decrease in pleasurable activities
 - moving and talking slowly
 - withdrawing from others
 - 6. Social level:
 - loss of important personal relationships
 - lack of social support
- Psychology is difficult to study and many challenges make the study of the brain, mind, and behaviour especially complex. For example:
 - 1. Human behaviour is difficult to predict:
 - Almost all actions are <u>multiply determined</u> (caused by many factors)
 - Need to be sceptical of <u>single-variable explanations</u> of behaviour (widespread in popular psychology)
 - 2. Psychological influences are rarely independent of each other:
 - Makes it difficult to pinpoint which cause or causes are operating
 - 3. People differ from each other in thinking, emotion, personality and behaviour:
 - <u>Individual differences:</u> variations among peopling in their thinking, emotion, personality, and behaviour
 - Each person responds in different ways to the same objective situation

- 4. People often influence each other:
 - Reciprocal determinism: the fact we mutually influence each other's behaviour
 - Difficult to isolate the causes of human behaviour
- 5. People's behaviour is often shaped by culture:
 - Cultural differences place limits on the generalisations that psychologists can draw about human behaviour
- We are prone to <u>naïve realism</u> (the belief that we see the world precisely as it is i.e., "seeing is believing"):
 - Often serves us well, but appearances can be deceiving and our intuitions are often wrong, especially when it comes to evaluating ourselves and others
 - Can lead us to draw incorrect conclusions about human nature
 - In many cases, "believing is seeing" our beliefs shape our perceptions of the world (often in ways we don't realise)
- To understand why others act the way they do, most of us trust our <u>common sense</u> (our gut instinct about how the social world works):
 - Sometimes correct, and can be a helpful guide for generating hypotheses that can later be scientifically tested, but should not be relied upon solely

Psychology as a Science

- <u>Science:</u> a systematic approach to evidence consisting of a set of attitudes and skills designed to prevent us from fooling ourselves
- Scientific theory: explanation for a large number of findings in the natural world
 - An account that ties multiple findings together
 - Generate predictions regarding new data not yet observed
- Hypothesis: testable prediction derived from a scientific theory
- Theories are general explanations, whereas hypotheses are specific predictions derived from those explanations
- Scientific methods are objective and use tools for overcoming any potential biases, especially:
 - <u>Confirmation bias:</u> the tendency to seek out evidence that supports our hypotheses and deny, dismiss or distort evidence that contradicts them
 - <u>Belief perseverance:</u> the tendency to stick to our initial beliefs even when evidence contradicts them

Popular Psychology & Pseudoscience

- <u>Popular psychology industry</u>: a sprawling network of everyday sources of information about human behaviour which are often incorrect (e.g., about 95% of self-help books are untested, and recent evidence suggests some may do more harm than good)
- <u>Pseudoscience</u> is a set of claims that seems scientific but isn't in particular, it lacks the safeguards against *confirmation bias* and *belief perseverance*
- Examples of pseudoscience: ESP, astrology, telepathy