PSYC1102 NOTES

SCIENTIFIC METHOD

CHAPTER 2 / LECTURE 2 – CRITICAL THINKING

Approach to PSYC in this unit

- This unit will focus on a correlation approach → relationships = the extent to which two variables co-vary.

Biases that influence our thinking

Hindsight = we tend to believe, after learning an outcome, that we would have foreseen it.
- Used in everyday life to explain behaviour.

Overconfidence = we tend to think we know more than we do.

Overgeneralization / illusory correlation = beliefs that inaccurately assume a relationship between two variables.

Self-fulfilling prophecies = we always try to confirm our beliefs – rather than disproving them.

False Consensus Effect = the tendency to overestimate the extent to which others share our beliefs and behaviours.

Availability heuristic = when more vivid and easily recalled examples bias us to believe these instances are more likely to occur.

Post hoc fallacy = we tend to believe that if one event precedes another it is probably causally related (post hoc ergo propter hoc – after this therefore because of this).

Biases Case Study: MMR & Autism
- Kids received MMR vaccine and many had autism.
- Scientist published an article that concluded that the MMR vaccine caused autism.
- Could have just been coincidental.
- Correlation but not causation.
- The study was later retracted from the journal.

Measuring variables

Operational definition = defines a variable in terms of the specific procedures used to produce or measure it.
- Translate concepts into something that is observable and measurable.

    - **Self-report measures** = ask people to report on their own knowledge, attitudes, experiences or behaviour.

DEVELOPMENTAL PSYCHOLOGY

CHAPTER 12 / LECTURE 3 – DEVELOPMENTAL PSYCHOLOGY: PHYSICAL DEVELOPMENT

- Big issues in developmental psychology
- Genetic make-up → development
- Infant research methods
- Physical development
  - ↳ Vision
  - ↳ Hearing
  - ↳ Taste and smell
  - ↳ Motor skills

Developmental psychology = examines biological, physical, psychological and behavioural changes that occur throughout life.

Big issues

ISSUE	DETAILS
Nature/Nurture	To what extent is our development the product of hereditary (nature) and of environment (nurture)? How do nature and nurture interact?
Sensitive / Critical Periods	Are some experiences especially important at particular ages? **Sensitive period =** an optimal age range for certain experiences, but if those experiences occur at another time, normal development is still possible. **Critical period =** an age range during which certain experiences must occur for development to proceed normally or along a certain path.
Continuity / Discontinuity	Is development a gradual, continuous process or a sequence of qualitatively distinct stages? Can it be both continuous and discontinuous?
Stability / Change	How consistent are our characteristics as we age? Do our early personality traits persist through life, or do we become different persons as we age?

Research Methods

❖ **Cross-sectional design =** the comparison of people at different ages at the same time.
- **Advantage:** data from many age groups can be collected relatively quickly.
- **Disadvantage:** the different age groups (called *cohorts*) grew up in different historical periods; people of the same cohort are likely to perform similar to each other, but different to other cohorts.

❖ **Longitudinal design =** involves testing the same cohort as it grows older.
- **Advantage:** everyone in the cohort has been exposed to the same historical time frame; avoids cohort effects; can examine causes of later abilities/behaviour.
- **Disadvantage:** time-consuming; sample may shrink with time; developmental experiences may be unique to a particular cohort.

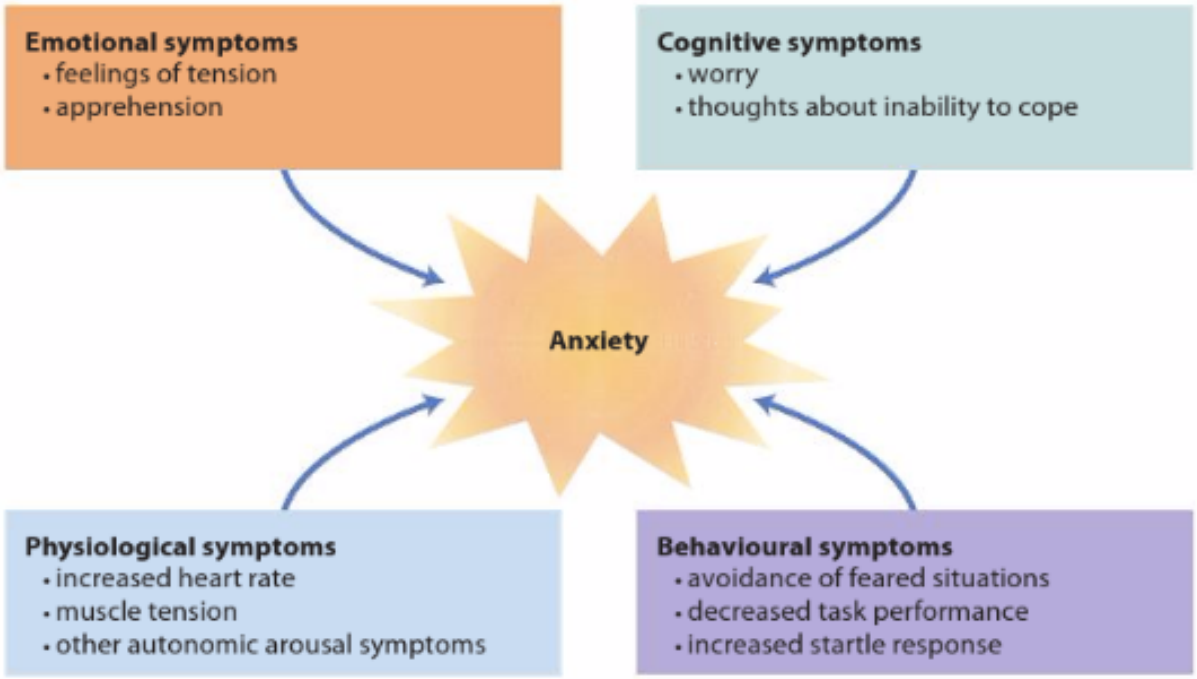
❖ **Sequential design =** involves combining the cross-sectional and longitudinal approaches.
- **Advantage:** most comprehensive.
- **Disadvantage:** most time-consuming and costly.

ABNORMAL PSYCHOLOGY

Anxiety & Related Disorders

Anxiety = *a natural response to perceived threat.*

- Anxiety responses have four components:
  1. *Subjective-emotional:* feelings of fear and apprehension.
  2. *Cognitive:* worrisome thoughts and a sense of inability to cope.
  3. *Physiological:* increased heart rate and blood pressure, muscle tension, rapid breathing, nausea or dry mouth.
  4. *Behavioural:* avoidance of certain situations and impaired performance.



Anxiety and related disorders = *the frequency and intensity of anxiety responses are out of proportion to the situations that trigger them.*

- Situations that individuals with such disorders so strongly fear would be judged as relatively non-threatening by other people.
- Number of different forms:
  - ↳ Phobic disorder
  - ↳ Generalised anxiety disorder
  - ↳ Panic disorder
  - ↳ OCD and PTSD – associated with abnormal levels of anxiety.

Phobias = strong and irrational fears of certain objects or situations.

- People with phobias do not always realise that their fears are out of proportion to the danger involved, and they feel helpless to deal with these fears.
- They make strenuous efforts to avoid the phobic situation or object.
- EXAMPLES
  - ↳ **Agoraphobia** = excessive fear of situations such as using public transport, being in a crowd, or being outside the home. The individual fears these situations because they believe that escape would be difficult, or help unavailable if panic-like symptoms or other distressing, embarrassing or incapacitating events were to occur.

PERSONALITY

CHAPTER 13 / LECTURE 13 – PERSONALITY I

- Understand what we mean by 'personality'
- Explain the trait perspective and how personality is measured under this perspective.
- Describe some of the systems of classification used to group people.
- Understand the person v situation debate.

Personality: Introduction

- Most psychologists believe it exists.

Personality

= the complex organisation of affects, cognitions and behaviours that provide the coherence and the direction to a person's life.

= the distinguishing pattern of psychological characteristics – thinking, feeling and behaving – that differentiates us from others and leads us to act consistently across situations.

= the distinctive and relatively enduring ways of thinking, feeling and acting that characterise a person's response to life situations.

- Two common observations that give rise to the concept of personality:
  1. 'Individuality' -
  2. 'Consistency' – people behave somewhat consistently over time and across different situations.
- Psychologists are interested in studying 'person-by-situation' interactions in their efforts to understand the distinctive behaviours of individuals.
- The thoughts, feelings and actions as seen to reflect one's personality typically have 3 characteristics.
  1. *Behavioural components of identity* that distinguish that person from others.
  2. Viewed as being caused by *internal rather than environmental factors.*
  3. Person's behaviours appear to have *organisation and structure* – suggests existence of inner, guiding personality.

Antique systems

⇒ Mythologies
⇒ Religions
⇒ Metaphors
⇒ Astrology.
  ↳ Complex non-scientific system.
⇒ Hippocrates
  ↳ Theory of humours.
  ↳ Four classic temperaments (types).
  ↳ Formed the basis for the modern definition of personality.

Hippocrates

- Personality is the result of the balance between bodily humours (fluids).

⇒ BLOOD (liver) – sanguine.
  ↳ Carefree, good-natured, malleable, sociable.
⇒ BLACK BILE (spleen) – melancholic.
  ↳ Anxious, suspicious, introspective, depressed.
⇒ YELLOW BILE (gall bladder) – choleric.

INTELLIGENCE

CHAPTER 13 / LECTURE 15 – INTELLIGENCE I

- Provide definition of intelligence.
- Understand the historical background to intelligence testing.
- Understand how the intelligence quotient and modern day intelligence scores are derived.
- Describe the major theories of intelligence.

Intelligence: introduction

Intelligence = the ability to learn from experience, remember things, reason, solve problems, and use knowledge to adapt to new situations.

Origins of Intelligence Testing

Alfred Binet (1905)

- New policies in France that required all children to go to school – French government commissioned Alfred to come up with a test method.
  - ↳ Developed objective tests of reasoning and problem solving.
  - ↳ Determined the tests that were the best indicators of school success.
- Developed concept of **mental age** = a measure of the average abilities of children at a certain age.
- Hoped that the testing would improve children's education quality.
- Believed that "the scale does not permit the measure of intelligence, because intellectual qualities… cannot be measured as linear surfaces are measured."
- Believed the environment was crucial in determining intelligence.

Lewis Terman (1916)

- Developed the *Stanford-Binet Intelligence Test*.
  - ↳ Took Binet's test to the US, added adult items to it and standardised the test.
- Viewed intelligence as a fixed and inherited entry.
  - ↳ Sympathetic to eugenics – to either encourage or discourage breading depending on their IQs.

William Stern (1912)

- Stanford-Binet Intelligence Test used a formula derived by Stern.
  - ↳ *Intelligence quotient (IQ)* = mental age / chronological age x 100

HEALTH PSYCHOLOGY

CHAPTER 14 / LECTURE 17 – HEALTH PSYCHOLOGY

- Understand the domain of health psychology.
- Describe the nature of different stressors.
- Describe the nature of different stress responses.
- Describe the nature of different stress mediators
- Explain the link between stress and illness.
- Describe some methods for alleviating stress.

Health Psychology

= addresses factors that influence well-being and illness, as well as measures that can be taken to promote health and prevent illness.

- Health psychologists are interested in psychological component
  - ↳ *Behaviour* (adoption and maintenance) – attempt to change hazardous behaviours.
  - ↳ *Emotional* (feelings)
  - ↳ *Cognition* (thoughts, beliefs, and attitudes).
  - ↳ *Personality* (characteristic ways of thinking and feeling).
- There are social, behavioural, cognitive and emotional factors that influence well-being and illness.
- Health promotion and disease prevention.
- Stress → thought to have negative effects on both physical and psychological well-being.
- Pain → central feature of many illnesses and is a major stressor.

Behavioural Foundations of Health

- Health-related behaviours fall into two main categories:

1. ***Health-enhancing behaviours*** = maintain or increase health.

   ⇒ EXERCISE

- ***Aerobic exercise =*** sustained activity, such as jogging, swimming and cycling, that raises the heart rate and increases the body's need for oxygen.
  - ↳ Has many benefits.
  - ↳ Is associated with physical health and longevity.
- Longitudinal follow-up studies suggest that regular exercise prolongs life.
- Extreme levels of exercise do not enhance health.
- Regular-moderate exercise produces the most benefits.
- Reduces chance of coronary heart disease.
- Vigorous exercise has positive psychological effects, improving mood, optimism and perceived control over life.

   ⇒ DIET / WEIGHT-CONTROL

- Obesity = BMI greater than 30.
  - ↳ An increasingly urgent problem.
- Obesity and overweight increase the risk of several physical conditions, including cardiovascular disease, kidney disease, cancer, chronic pain and diabetes.

2. ***Health-threatening behaviours*** = make illnesses more likely.

TYPE A BEHAVIOUR PATTERN (TABP)

LANGUAGE & SOCIAL PSYCHOLOGY

⇒ Language allows us to:
  ↳ Communicate ideas from person to person.
  ↳ Transmit accumulated knowledge across generations.
  ↳ Know much more than we've ever seen.
⇒ Language comes in different forms:
  ↳ Spoken
  ↳ Written
  ↳ Signed.

Language Properties

Symbolic & Structured

⇒ Uses sounds, written characters or some other system of symbols to represent objects, ideas, events, feelings and actions.
⇒ Rule-governed structure.

Grammar = the set of rules that dictates how symbols can be combined to create meaningful units of communication.

⇒ ***Syntax =*** the rules that govern the order of words.
  ↳ English: The boy [subject] at [verb] the cake [object].
  ↳ Japanese: The boy [subject] cake [object] ate [verb].
⇒ ***Semantics =*** how we derive meaning from morphemes, words and sentence; the rules that determine how symbols are connected to what they represent.
⇒ **RULE**: +ed – to make a past tense statement.
  ↳ I want a burger.
  ↳ I wanted a burger.

E.g. Bat (1 morpheme) or unladylike (3 morphemes)

Generativity = the symbols of language can be combined to generate an infinite number of messages that have novel meaning.

⇒ English language has only 26 characters, which can be combined into more than half a million words, which can be combined to create a virtually limitless number of sentences.

Displacement = language allows us to communicate about events and objects that are not physically present.

Language Structure

Surface vs Deep Structure

⇒ Sentences can differ in surface structure but have the same deep structure.
⇒ ***Surface structure =*** consists of the symbols that are used and their order.
  ↳ Syntax.
⇒ ***Deep structure =*** refers to the underlying meaning of the combined symbols.
  ↳ Semantics.

Hierarchical Structure

⇒ Simple to complex.

⇒ ***Phoneme =*** the smallest unit of speech sound in a language that can a difference in meaning.

Cross-Cultural Psychology

History of Critical Thinking & Reflection

- Middle ages → no idea of concept of cause and effect.
- Concept emerged in Enlightenment.

William James

- Identified two types of thinking.
  - ↳ Tender-minded – use of logic.
  - ↳ Tough-minded – empiricism as basis.
- Must use both.

Walker & Sonn (2010)

- Outline critically reflective practice.
- Described as an ongoing process through which mental health professionals develop a clearer understanding of:
  - ↳ Their roles.
  - ↳ The power relationships operating within their work.
  - ↳ The range of strategies to address the issues and concerns they're facing.
- Argue:
  - ↳ Value of critical reflexivity resides in people interrogating the political, social and cultural positioning of Indigenous people in temporal terms and geographic contexts to affirm and validate indigenous identity and difference.
  - ↳ These explicit competencies allow people to navigate the cultural interface → make a difference to Indigenous health and wellbeing.

Cross-Cultural Research

- Cross-cultural psychologists compare the similarities and differences in behaviour across different societies or cultures.
- Previously, and still now, culture considered a contextual factor → not included in research design.
- Cross cultural research may be:

⇒ **Emic** = focused on specific psychological aspects of a culture.

- Intracultural diversity → renders assumptions accurate to greater or lesser degree, → variability in individual conformity within broad cultural expectations.
- Cultural psychology = examining / describing a culture from within and within its own terms.
  - ↳ Studies the way people are affected by their surrounding culture.
  - ↳ Research → qualitative.

⇒ **Etic** = commonalities or differences across cultures

- Compare psychological characteristics between cultures.
- Tend to lend themselves to quantitative methods.
  - ↳ Culture is the independent variable.
- EXAMPLES: perception; mental illness; personality; parenting.

Challenges

- Issues with reliability (consistency in measurement) and validity (measuring what it is said to measure) are heightened.

- Linguistic equivalence: back translation (instrument translated into one language and then translated back into original language) → if the meaning is different = problem.