Lecture 1 – Introduction to the Science of Psychology

1.1 Definition of Psychology

This is the Greek letter psi It is the symbol of Psychology It literally means 'mind' (psyche)



- The problem is the 'mind'
- '...ology' means 'knowledge of' or 'understanding of' or 'study of'
- Therefore, psych + ology literally means 'study of the mind' or 'knowledge of the mind' or 'understanding of the mind'.
- Passer, Smith and Norris (2016, p. 6) state:

"Psychology is the scientific study of the behaviour and the mind."

Behaviour

"... actions and responses that we can directly observe..."

(Passer, Smith & Norris, 2006, p.6)

- These are behaviours we can: record, describe, count, graph, etc.
- What are some of these behaviours?
 Walking into class late behaviour, scratching head behaviour, writing notes behaviour, looking in direction as if attentive behaviour, etc.

Mind

"... internal states and processes – such as thoughts and feelings – that cannot be seen directly and must be inferred from observable, measurable responses."

(Passer, Smith & Norris, p.6)

For example, when we see what's inside of someone, we are often right, but can be wrong.

• How can we make accurate (valid and reliable) inferences about behaviours we cannot directly observe?

1.2 The Science of Psychology

- Psychology is the <u>scientific</u> study
- Here are some stories to help to understand 'scientific study'
 Scientific Thinking
 - Example 1 Clever Hans' It's a trick. You can't believe all the evidence in your eyes.

 - 'Example 3 Mind over Matter (2) (Levitation)' It's a trick. You can't believe all the evidence in your eyes.

Some Characteristics of Science

• Uses systematic and careful observations

- Builds theories which are able to be:
 - Tested
 - Falsified
- Adheres to the principle of *parsimony*
 - Prefer the simpler of two competing hypotheses
- Incorporates an attitude of scepticism
 - A doubting, questioning attitude weighing of evidence not all evidence is equal

Goals of Psychology

- To
 - describe how people (and other species) behave (what do they do?)
 - understand the causes of these behaviours (why do they do it?)
 - predict how people will behave under certain conditions
 - influence behaviour through the control of its causes
 - apply psychological knowledge to enhance human welfare

1.3 Psychological Perspectives for Understanding Human Behaviour

- What advice would you give to someone who wants to know how to have a nice day?
 It would depend on your perspective.
- Perspectives are different ways of understanding behaviour.

Levels of Analysis Framework

- ... we are biological creatures living in a complex social world...
- Behaviour and its causes can be examined at the following levels:
 - Biological (e.g. brain processes, genetic influences)
 - Psychological (e.g. thoughts, feelings, motivations)
 - Environmental (e.g. to past and current physical and social environments to which we are exposed)
- What advice would you give to someone who wants to know how to study effectively?
 It depends on your perspective

Levels of Analysis Applied to Learning & Study

Biological Level

- Healthy lifestyle:
 - Sleep
 - Diet
 - Exercise
 - Stress Management

Social/Environmental Level

- Social supports
- Cultural/social norms related to studying and learning
- Past experiences of study and learning
- Learning from others

The Individual in Society

Psychological Level

- Memory factors:
 - Depth of processing
 - Spaced practice
 - Recall vs recognition
- 'Premacks Principle'
- Time-management skills

Lecture 2 – Major Perspectives in Psychology

2.1. Recap

Definition of Psychology

- The literal definition of psychology is not precise enough.
- Definition:

Psychology is the <u>scientific study</u> of <u>behaviour</u> and the <u>mind</u>

- Behaviour: actions and responses that we can directly observe
- Mind: internal states and processes such as thoughts and feelings that cannot be seen directly and must be inferred from observable, measurable responses
- Some characteristics of science:
 - Systematic observations
 - Builds theories that can be finalised
 - Scepticism & Parsimony
- Goals of Psychology:
 - Describe (what people do)
 - Understand (why people behave in that way)
 - Predict (predict people's behaviour)
 - Influence (influence behaviour)
 - Apply (apply it to the greater good)
- Major perspectives:
 - There are different ways of understanding human behaviour
- Levels of Analysis
 - Behaviour and its causes can be examined at the Biological, Psychological or Environmental/Social levels:

Major Perspectives

Early Schools - Structuralism (how are things made up - I have a left hand) & Functionalism (what they do - I write with my left hand)

Psychodynamic – forces within

Behavioural – power of the environment

Humanistic – self-actualisation & positive psychology

Cognitive – the thinking human – how we solve problems, how our memories work

Sociocultural – embedded human

Biological – brains, genes and evolution

2.2. Psychoanalytic Perspective

Psycho-dynamic – Psycho-analytic

Founder of psychoanalysis was Sigmund Freud 1856-1939

- Psychoanalytic psychology
 - Clashing, conflicting intra-psychic forces
 - Life 'instinct' Libido
 - Death 'instinct' Thanatos
- Psychoanalytic theory
 - Freud's theory that our behaviour is triggered by intra-psychic forces we are not aware of these triggers because:

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- They are deep within our unconscious mind
- ♣ They are deep within our unconscious mind because anxiety (neurosis) keeps them there
- How do we get anxious (neurotic)?
 - The importance of dreams, and
 - The 'talking cure'.
- Development of the human 'personality'
 - Id (don't understand well), Ego (submerged) & Superego (further submerged)

Defence Mechanisms

Unconscious strategies that people use to reduce anxiety by concealing the source from themselves and others.

Examples

- Denial (denying some reality)
- Sublimation
- Projection
- Regression
- Displacement
- Repression
- Do you know anyone who is anally retentive?
 - The *anally retentive* personality is stingy, with a compulsive seeking of order and tidiness. The person is generally stubborn and a perfectionist.

Or perhaps you know someone who is anally expulsive

- The *anally expulsive* personality is the opposite of the anally retentive personality, and has a lack of self-control, being generally messy and careless.
- Fears or phobias (irrational fears):
 - Freud deep seated anxieties usually to do with 'conflict' in childhood.
 - Dreams contain symbols of these anxieties.
 - Little (not clever) Hans' fear of horses.
 - John Watson & poor Little Albert.

2.3. Behavioural Perspective - Classical Conditioning

- Classical Conditioning (learning) Pavlov's Dogs (Pavlov is a well-known Russian Psychologist)
 - The language of 'stimulus response'
- Pavlovian Conditioning
 - The neutral stimulus
 - Unconditioned/learned stimulus
 - A learned stimulus
- Neutral Stimulus (NS)
 - A stimulus that before conditioning has no effect on the desired response
- Unconditional stimulus (UCS)
 - A stimulus that brings about a response without having been learned
- Unconditioned response (UCR)
 - A response that is natural and needs no learning