Part 1: Core

The study of the biological level of analysis, the cognitive level of analysis and the sociocultural level of analysis comprises the core of the psychology course.

The three levels of analysis focus on three fundamental influences on behaviour:

- biological
- cognitive
- sociocultural.

The interaction of these influences substantially determines behaviour.

The level of analysis approach reflects a modern trend in psychology towards integration and demonstrates how explanations offered by each of the three levels of analysis (biological, cognitive and sociocultural) complement one another and together provide more complete and satisfactory explanations of behaviour.

The three levels of analysis can be usefully compared to three microscope lenses of different magnification. Each lens reveals a different picture of the intricate structure that exists at a variety of levels, but no single picture explains the whole object; a synthesis is necessary. Synthesis of the rich and diverse content of modern psychology is the chief aim of IB psychology.

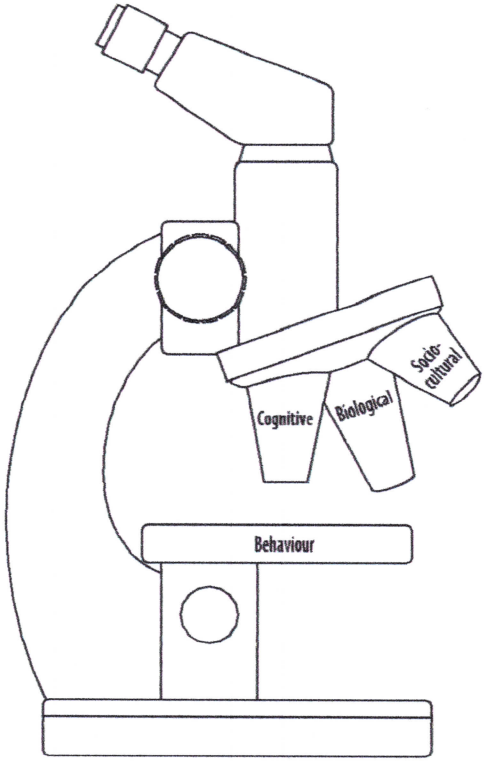

Figure 1

Microscope lenses analogy for the three levels of analysis

PRINCIPLES OF IB PSYCHOLOGY

Biological Level of Analysis

1. There are biological correlates of behavior
   - Parkinson's disease
   - Depression and serotonin
   - Broca's and Wernicke's aphasias
   - Phineas Gage
   - Maguire, et. al. (2000)--Pearson: London taxi cab drivers' hippocampi

2. Animal research can provide insight into human behavior
   - Pavlov's dogs and Classical Conditioning
   - Rat lab--pigeons and rats and Operant Conditioning
   - Montane and prairie voles and oxytocin receptors
   - Genetically modified mice and rats--e.g., alcoholism

3. Human behavior is, to some extent, genetically based
   - Twin studies and OCEAN personality traits
   - Heritability of mental disorders

Cognitive Level of Analysis

1. Human beings are information processors and mental processes guide human behavior
   - Categorizing and stereotyping in social cognitive perspective
   - Heuristics such as halo effects (e.g., "What is beautiful is good")
   - Attributions (internal vs. external)
   - Observational Learning theory (Bandura)

2. The mind can be studied scientifically
   - Brain imaging, esp. fMRI
   - Split brain research
   - "Natural experiments," e.g., "Tan" (Paul Broca), HM, Clive Wearing

Cognitive processes are influenced by social and cultural factors
   - Bartlett's "War of Ghosts" study and schemas (Pearson)
   - Flashbulb memories in individualistic and collectivistic cultures (Pearson)
   - Fundamental Attribution Error--primarily in individualistic, Western societies

Sociocultural Level of Analysis

1. Human beings are social animals with a basic need to belong
   - Tajfel's Minimal Group theory
   - Conformity and obedience studies: Asch and Milgram
   - Lack of social connectedness as risk factor for mental ill-health
   - Sadness as motivator of repairing broken relationships
   - Attachment theory--secure, insecure...

2. Culture influences human behavior
    - Gender identity and gender roles
    - Display rules of emotion
    - Collectivistic vs. individualistic cultures

3. Humans have a social self which reflects their group membership
    - Stanford Prison Experiment
    - Robbers Cave study (Sherifs)
    - Tajfel's Social Identity Theory/SIT (Pearson book)--superordinate identities