HPSC3023: THE HISTORY AND PHILOSOPHY OF PSYCHOLOGY AND PSYCHIATRY

Lecture One: The Relationship Between Psychology and Philosophy

Introduction

- Taking a critical look at mainstream Anglo-American psychology

Two Key Assumptions in Psychology

1. Philosophy is irrelevant to Psychology (because Psychology is *now* a science)
    - Psychology emerged from Philosophy (around the 1870s when the first Psychology experiment was performed)
    - Scientific psychologists should not be concerned about philosophy
2. Progress in Psychology can *only* be achieved by:
    - Deducing an hypothesis from a theory (i.e. generate predictions)
    - Conducting empirical test of hypotheses and this involves:
        - Making controlled observations
        - Measuring psychological variables
        - Using statistical procedures
    - The only way to get rid of a concept is to go out and collect data that may refute the theory and render it useless or misleading

- These two key assumptions are false
    - Held by mainstream psychology because it suffers from "physics envy"
        - Forgets about the relevance of theoretical physicists that inform empirical physicists

Two Ways to Test a Theory

- By conducting *empirical* tests of hypotheses logically derived from the theory
    - Hypothetico-deductive method
- By conducting *logical/philosophical* tests of the theory itself
    - Conceptual analysis

What is the Hypothetico-Deductive Method?

- Scientific research begins first with a review of the literature – aim: to generate hypotheses
    - The actual practice of science, however, is more complicated than beginning with a literature review
- Research hypothesis *should* be a logical deduction of the theoretical statements in the literature review
    - In practice, most psychologists don't *deduce* their research hypotheses – they simply *derive* them
        - There are lots of statements that underpin those that are used to deduce a hypothesis
            - Can be errors in these assumptions
            - Swathe of hidden assumptions, presuppositions and theoretical statements supporting these statements
            - Some psychologists' wilful blindness about risk of erroneous foundational assumptions justified as a lack of relevance to research

Outline of a Theoretical System

- **Axiom:** Statements of the most general kind
  - *Usually* taken as self-evidently true
  - Identity (e.g. All *A* is *A*)
  - Non-contradiction (e.g. Not both *A* and not *A*)
  - Excluded middle (e.g. Either *A* or not *A*)
- **Philosophical statements:** Statements about universal or very general issues
  - Usually taken as either true or false
  - E.g. All attributes (properties and relations) are quantitative
- **Theoretical statements:** Statements of a less general kind
  - Either true or false
  - E.g. All psychological tendencies are underlying causes of thoughts, feelings and actions (McCrae & Costa, 2008)
- Axioms → Philosophical statements → Theoretical statements → Research hypotheses
  - Each stage drives the next, whether or not an earlier stage might be considered (or suspected) false
- Data may not be evidence of a general phenomenon (e.g. Parapsychology)

Conceptual Analysis

- Conceptual analysis is the *logically* prior scientific task
- Testing theories conceptually is often neglected in Psychology
  - Conceptual analysis is necessary – no less important than empirical analysis
- If a theoretical statement is incoherent, it is necessarily false
- Doing conceptual research, can't show if empirical research is false but can show a statement is false
- A theory is *logically* deficient if:
  - Concepts and definitions are vague or ambiguous
  - Concepts and definitions are clear but involve fallacious reasoning
  - At least two statements in the theory

What Can Conceptual Analysis Achieve in Psychology?

- Trying to help science by reframing the theory that hadn't been framed coherently
  - New hypotheses can then be tested empirically

Lecture Two: Logical Positivism's Influence on Psychology

Part One

Assumptions in Psychology

- No testing of the assumptions that underpin data
  - Field of psychology is "out of kilter"
- 2nd-half of 19th century – Psychology started being taken seriously in institutions

Key Definitions

- **Metaphysics:** The general conditions/ingredients of all (anything) that exists
  - Concerned with the very general aspects of anything that exists in the world
  - No matter what it is, there will be universal aspects common to everything
    - E.g. Causation
- **Ontology:** What exists and what does not exist
  - E.g. Does the Bystander Effect *really* exist?
- **Epistemology:** Knowledge; The nature of knowledge
  - What it is to know → How we justify our (scientific) knowledge

Positivism

- Comte and Mach took metaphysics to be highly speculative and referring only to mystical, unobservable forces
  - i.e. "Anti-Science"
  - Considered unscientific because metaphysics considered causes to be unknowable and unobservable
- Positivism placed great faith in science
  - "No time" for metaphysics or religious thinking
- The dominant scientific philosophy of the day is like air
  - Unconsciously influences thoughts, views and actions
- Charles Darwin (1861) espoused anti-Positivism views when discussing geology (in letter to Henry Fawcett)

Logical Positivism

- Emerged primarily in Vienna, Austria, in first 20-30 years of 20th century (in the Vienna Circle)
  - Began as a European philosophy of science
  - Theory of "exact thinking" drove Logical Positivism
- Key feature of Logical Positivism: Metaphysics is nonsense
  - Central aim was "exact thinking" → Goal was to rid science and thinking of metaphysical statements
    - Highly speculative, unobservable statements that can't be tested → not scientific
    - Metaphysical statements considered to be present due to linguistic negligence
- Named "logical" because it made use of research into Logic at the turn of the century
- Drew a line between *theoretical* and *observational* statements to get rid of metaphysical "nonsense"

    - **Theoretical statements:** Contain terms/concepts that are unobservable
        - Acceptable so far as they don't exceed the bounds of the observational statements
        - Considered unacceptable as they generally contain concepts/terms that are unobservable → therefore, unverifiable
            - E.g. Intelligence, trait, superego, Self, mental representation
    - Observational (a.k.a. protocol) statements considered certain and reliable
        - Hence, science should rest on observational statements
- Logical Positivism was a reaction to introspection and religious thinking
    - Scientists should make certain the absence of metaphysical statements
        - i.e. Make research reliable
- **Verifiability principle:** The meaning of a proposition is its *method* of verification
    - To test whether theoretical statement is *genuinely* scientific
    - How a researcher would go about verifying the existence of the concept or statement
    - Need to know the *meaning* to determine how to verify the statement
        - Need to have some sense of what you are looking for
    - E.g.

Theoretical statements	Observational statements
"Intelligence"	"Intelligence is the capacity to do well in an intelligence test" (Boring, 1923)

The Legacy of Logical Positivism in Psychology

- Observation statements and data privileged over theory and philosophy
- Methodological fetishism at the expense of phenomena of interest
    - "Although they are an important part of psychology, **inner phenomena like thought, emotion, and ambition are not part of the basic definition *because they are not observable***" (Kimble, 1989)
- The verifiability principle is still implicitly assumed through the doctrine of *operationalism*

Operationalism

- **Operationalism:** The meaning of a concept is synonymous with a set of operations necessary to measure or manipulate that concept/variable (Bridgman, 1927)
    - The meaning of a concept is given by the operations used to identify it