

# Psychology: Themes and Variations Second Canadian Edition

Class 2: September 15, 2009



## Chapter 1

### The Evolution of Psychology



# What is Psychology?

- Greek - "Psyche" - "the mind" and "logos" – "study of"
- "the systematic, and sometimes scientific, study of human/animal mental functions and behaviour"
  - Wikipedia
- What do you think?

[http://  
www.online-  
stopwatch.com  
/full-screen-  
stopwatch/](http://www.online-stopwatch.com/full-screen-stopwatch/)



# What is Psychology?

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Hospitals

Sports

Computers

Clinical Psychology

Schools

Counseling

The Brain

Abnormal Psychology

Applied Psychology

Positive Psychology

Experiments

Cognition

Physiological Psychology

Evolutionary Psychology

Artificial Intelligence

Industrial Psychology

# The Development of Psychology: From Speculation to Science

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- Prior to 1879
  - Physiology and philosophy scholars studying questions about the mind
  - **René Descartes** – “I think, therefore I am”
  - **John Locke** – Theory of mind and Empiricism (knowledge arises from experience)
  - **Immanuel Kant** – identified psychology as something separate from philosophy, but did not think it could be analyzed scientifically
  - **Hermann von Helmholtz** – sensory physiology – theory of vision



## Wilhelm Wundt (1832-1920) University of Leipzig, Germany

- **Introspection** as method for studying the mind
- Campaigned to make psychology an independent discipline
- Established the first laboratory for the study of psychology in 1879

# Wilhelm Wundt's International Influence

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- Leipzig, the place to study psychology
  - Graduates of Wundt's program set up new labs across Europe and North America
- G. Stanley Hall (1846-1924), Johns Hopkins University
  - Established the first psychology laboratory in the U.S. in 1883
- Between 1883 and 1893, 24 new laboratories in North America
- James Mark Baldwin founded the first Psychology Laboratory in Canada 1891. Psychology gained department status at the St. George campus in 1927.
- Baldwin and James Gibson Hume from the University of Toronto help to establish the American Psychological Association with G. Stanley Hall in 1892

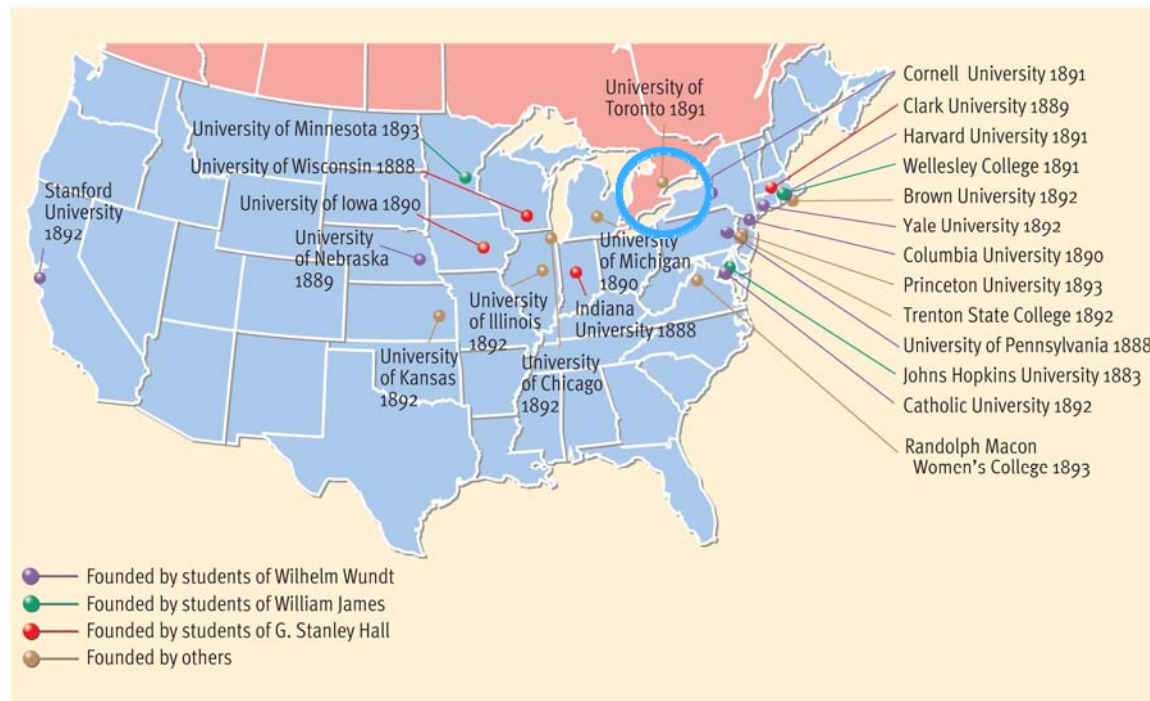
# Early Psychology Research Laboratories in North America

**Figure 1.1**

**Early research laboratories in North America.**

This map highlights the location and year of founding of the first 24 psychological research labs established in North American colleges and universities. As the colour coding shows, a great many of these labs were founded by the students of Wilhelm Wundt, G. Stanley Hall, and William James.

Source: Based on Garvey, 1929; Hilgard, 1987.



# The Battle of the “Schools”: Structuralism vs. Functionalism

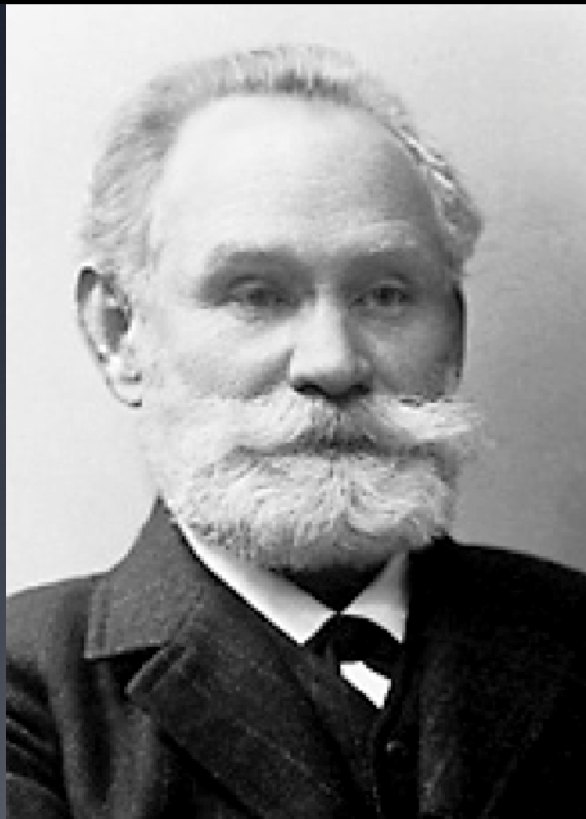
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- Two intellectual schools of thought regarding the science of psychology
  - Structuralism – led by Edward Titchener
    - Focused on analyzing consciousness into basic elements
    - **Introspection** – careful, systematic observations of one’s own conscious experience
  - Functionalism – led by William James
    - Focused on investigating the function or purpose of consciousness
    - Led to investigation of mental testing, developmental patterns, and sex differences
    - May have attracted the first women into the field of psychology

# Who Won the Battle?

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- Most historians give the edge to James and the functionalists
  - Depending on introspection does not allow for any independent objective evaluation of a claim
  - Today, psychologists are not really categorized as structuralists or functionalists
- Applied psychology and Behaviourism - descendants of functionalism
  - Behaviourism - early 1900's
    - The next major school of thought to influence the development of psychology



Development of Behaviourism  
– Ivan Pavlov – 1890's



- "Classical" conditioning
- Very basic form of learning
- Reflex can be elicited by a cue

# Behaviourism: Redefining Psychology

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- John B. Watson (1878-1958): United States
  - Founder of Behaviourism
- Psychology = scientific study of behaviour
- Behaviour = overt or observable responses or activities
  - Radical reorientation of psychology as a science of observable behaviour
  - Study of consciousness abandoned
- Stimulus = any detectable input from the environment

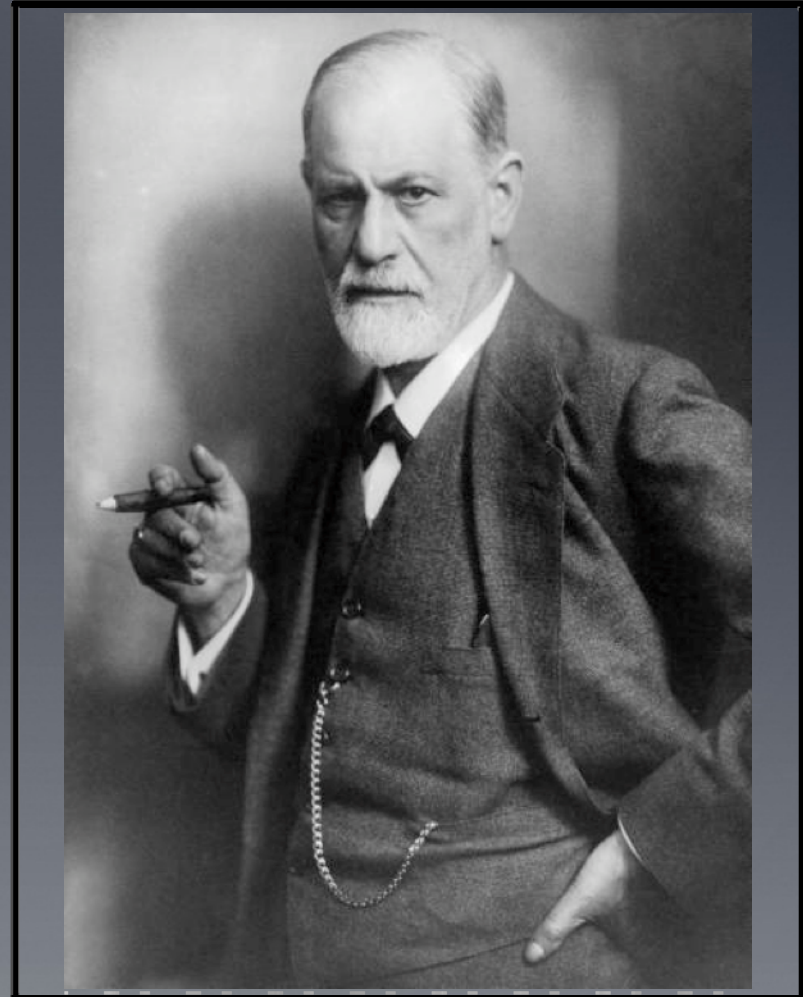
# John Watson and the Nature-Nurture Debate

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- Nurture, not nature
  - *“give me a dozen healthy infants, well-formed, and my own special world to bring them up in and I’ll guarantee to take any one at random and train him to become any type of specialist I might select – doctor, lawyer, artist, merchant-chief, and yes, even beggar-man and thief...”*
- Behaviourist school of thought emphasized the environment (nurture)
- Focus on stimulus-response relationships
- S-R psychology

# Sigmund Freud and the Concept of the Unconscious Mind

- Sigmund Freud (1856-1939): Austria
- Founded Psychoanalytic school of thought
- Emphasis on unconscious processes influencing behaviour
  - Unconscious = thoughts, memories, and desires that are below the surface of conscious awareness but exert great influence on behaviour



# Freud's Ideas: Controversy and Influence

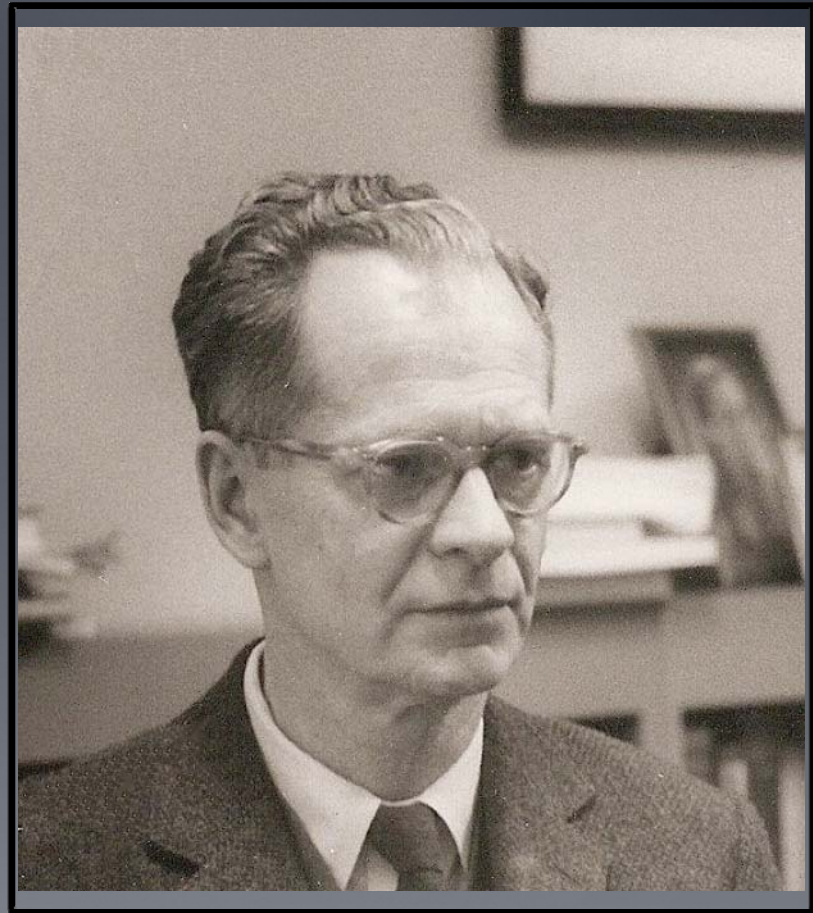
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- Behaviour is influenced by the unconscious
- Unconscious conflict related to sexuality plays a central role in behaviour
- Controversial notions caused debate and resistance
- Significant influence on the field of psychology

# Behaviourism Revisited:

## B.F. Skinner

- Environmental factors determine behaviour
- Responses that lead to positive outcomes are repeated
- Responses that lead to negative outcomes are not repeated
- Beyond Freedom and Dignity
- More controversy regarding free will and the debate between nature vs. nurture



# The 1950's: Opposition to Psychoanalytic Theory and Behaviourism

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- Charges that both were de-humanizing
- Diverse opposition groups got together to form a loose alliance
- A new school of thought emerged - **Humanism**
  - Led by Abraham Maslow (1908-1970) and Carl Rogers (1902-1987)
  - Emphasis on the unique qualities of humans: freedom and personal growth

# Psychology's Roots in Canada

- Canadian Psychological Association founded in 1939 – membership 6313 (CPA, 2008)
- Important contributions by Brenda Milner and Donald Hebb
- Renowned McGill University brain expert Dr. Brenda Milner has been named one of four recipients of the prestigious International Balzan Prize for 2009, which is worth approximately \$1 million Canadian, for her work in cognitive neuroscience.



# Putting the Psyche Back in Psychology: The Return of Cognition

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- Cognition = mental processes involved in acquiring knowledge
- 1950's and 60's – Piaget, Chomsky, and Simon
  - Application of scientific methods to studying internal mental events
  - Cognitive psychology: the new dominant perspective?

# Physiological Psychology: The Biological Basis of Behaviour

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Biological perspective - behaviour explained in terms of physiological processes

- **James Olds (1956)**
  - Electrical stimulation of the brain evokes emotional responses in animals
- **Roger Sperry (1981)**
  - Left and right brain specialization
- **Donald Hebb (1949)**
  - Cell-assemblies describe neural networks

# Contemporary Psychology: Cultural Diversity

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- Ethnocentrism – viewing one's own group as superior and as the standard for judging
- Historically: middle and upper class white males studying middle and upper class white males
- 1980's – increased interest in how cultural factors influence behaviour
- growing global interdependence
- increased cultural diversity

# Evolutionary Psychology: Behavioural Patterns in Terms of Evolutionary Significance

- Central premise: natural selection occurs for behavioural, as well as physical, characteristics
- Buss, Daly & Wilson, Cosmides & Tooby – 80's and 90's
  - Studied natural selection of mating preferences, jealousy, aggression, sexual behaviour, language, decision making, personality, and development
    - Thought provoking perspective gaining in influence, but not without criticism



# Positive Psychology

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- Positive Psychology uses theory and research to better understand the positive, aspects of human existence.
- Positive subjective experiences
- Individual traits
- Positive institutions and communities

# Psychology Today: A Thriving Science and Profession

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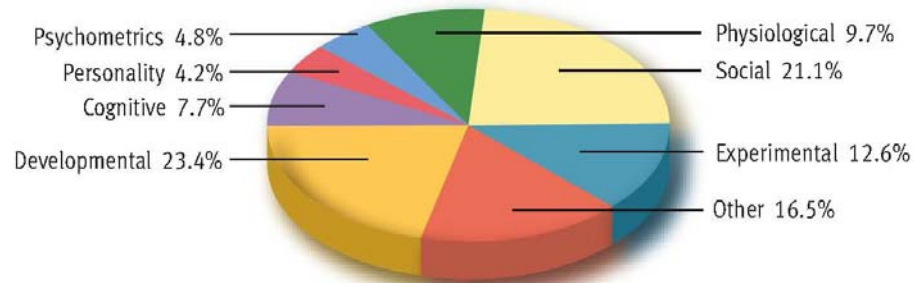
- Psychology is the science that studies behaviour and the physiological and cognitive processes that underlie it, and it is the profession that applies the accumulated knowledge of this science to practical problems.

- Research: Seven major areas

Personality, Psychometrics, Social, Cognitive,  
Physiological, Developmental, and Experimental

- Applied Psychology: Four major areas

Clinical, Counselling, Educational and School,  
and Industrial Organization

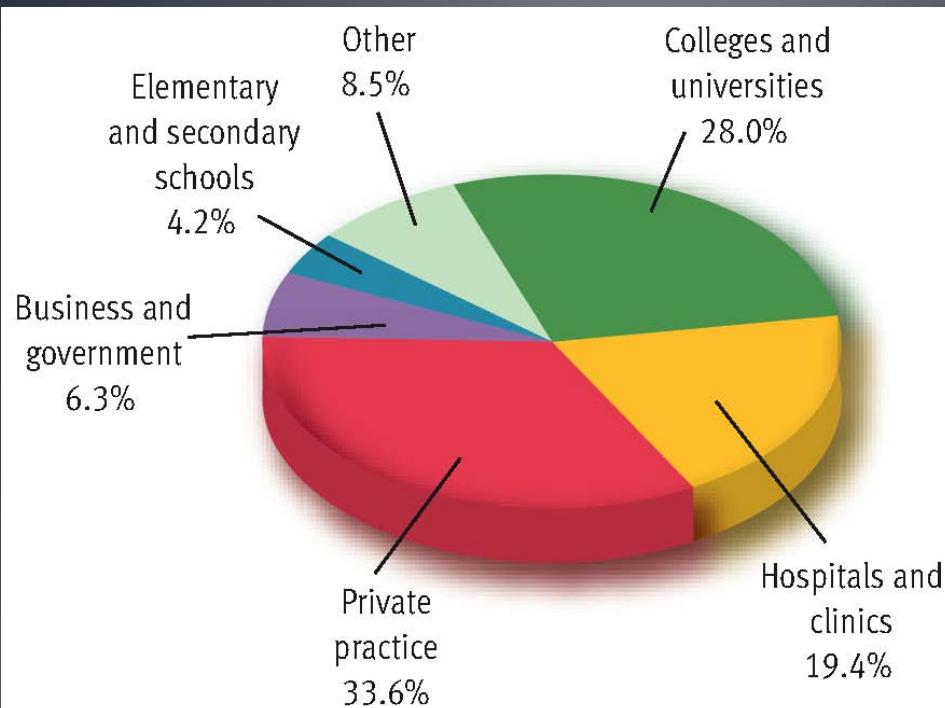


Area	Focus of research
<b>Developmental psychology</b>	Looks at human development across the life span. Developmental psychology once focused primarily on child development but today devotes a great deal of research to adolescence, adulthood, and old age.
<b>Social psychology</b>	Focuses on interpersonal behaviour and the role of social forces in governing behaviour. Typical topics include attitude formation, attitude change, prejudice, conformity, attraction, aggression, intimate relationships, and behaviour in groups.
<b>Experimental psychology</b>	Encompasses the traditional core of topics that psychology focused on heavily in its first half-century as a science: sensation, perception, learning, conditioning, motivation, and emotion. The name experimental psychology is somewhat misleading, as this is not the only area in which experiments are done. Psychologists working in all the areas listed here conduct experiments.
<b>Physiological psychology</b>	Examines the influence of genetic factors on behaviour and the role of the brain, nervous system, endocrine system, and bodily chemicals in the regulation of behaviour.
<b>Cognitive psychology</b>	Focuses on “higher” mental processes, such as memory, reasoning, information processing, language, problem solving, decision making, and creativity.
<b>Personality</b>	Is interested in describing and understanding individuals’ consistency in behaviour, which represents their personality. This area of interest is also concerned with the factors that shape personality and with personality assessment.
<b>Psychometrics</b>	Is concerned with the measurement of behaviour and capacities, usually through the development of psychological tests. Psychometrics is involved with the design of tests to assess personality, intelligence, and a wide range of abilities. It is also concerned with the development of new techniques for statistical analysis.

**Figure 1.6**

**Major research areas in contemporary psychology.** Most research psychologists specialize in one of the seven broad areas described here. The figures in the pie chart reflect the percentage of academic and research psychologists belonging to APA who identify each area as their primary interest.

Source: Based on 2000 APA Directory Survey.



**Figure 1.5**

**Employment of psychologists by setting.** The work settings in which psychologists are employed have become very diverse. Survey data on the primary employment setting of APA members indicates that one-third are in private practice (compared to 12% in 1976) and only 28% work in colleges and universities (compared to 47% in 1976). These data may slightly underestimate the percentage of psychologists in academia, given the competition between APA and APS to represent research psychologists.

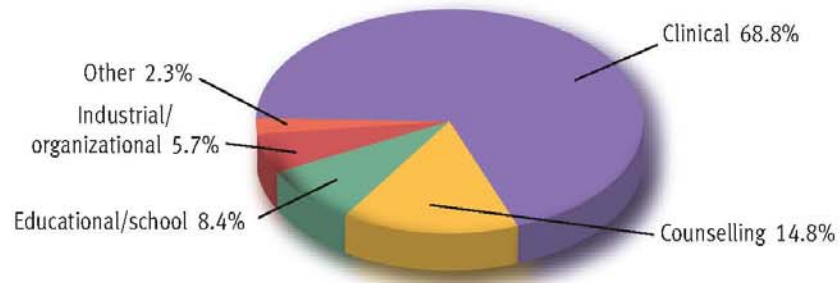
**Source:** Based on 2000 APA Directory Survey.

**Figure 1.7**

**Principal professional specialties in contemporary psychology.**

Most psychologists who deliver professional services to the public specialize in one of the four areas described here. The figures in the pie chart reflect the percentage of APA members delivering professional services who identify each area as their chief specialty.

Source: Based on 2000 APA Directory Survey.



Specialty	Focus of professional practice
<b>Clinical psychology</b>	Clinical psychologists are concerned with the evaluation, diagnosis, and treatment of individuals with psychological disorders, as well as treatment of less severe behavioural and emotional problems. Principal activities include interviewing clients, psychological testing, and providing group or individual psychotherapy.
<b>Counselling psychology</b>	Counselling psychology overlaps with clinical psychology in that specialists in both areas engage in similar activities—interviewing, testing, and providing therapy. However, counselling psychologists usually work with a somewhat different clientele, providing assistance to people struggling with everyday problems of moderate severity. Thus, they often specialize in family, marital, or career counselling.
<b>Educational and school psychology</b>	Educational psychologists work to improve curriculum design, achievement testing, teacher training, and other aspects of the educational process. School psychologists usually work in elementary or secondary schools, where they test and counsel children having difficulties in school and aid parents and teachers in solving school-related problems.
<b>Industrial and organizational psychology</b>	Psychologists in this area perform a wide variety of tasks in the world of business and industry. These tasks include running human resources departments, working to improve staff morale and attitudes, striving to increase job satisfaction and productivity, examining organizational structures and procedures, and making recommendations for improvements.

# Studying Psychology: Seven Organizing Themes

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- Themes related to psychology as a field of study:
  - Psychology is empirical (Theme 1)
  - Psychology is theoretically diverse (Theme 2)
  - Psychology evolves in a sociohistorical context (Theme 3).
- Themes related to psychology's subject matter:
  - Behaviour is determined by multiple causes (Theme 4)
  - Behaviour is shaped by cultural heritage (Theme 5)
  - Behaviour is influenced jointly by heredity and environment (Theme 6).
- Finally, people's experience of the world is highly subjective (Theme 7).