

Chapter 13

The Rise of Applied Psychology

Conflict Between Scientific and Professional (Business) Values

Scientist's activities

- Do research, publish articles 7 books, review journal articles (for no pay)
- Attend academic conferences (no free lunches)
- Develop experimental tests - not commercialized
- Lobby gov' ts for research money
- Teach, give interviews, colloquia & seminars, examine theses (for no pay)
- Advise students, write letters of reference for students
- *Give away their knowledge*

Scientific and Professional (Business) Values - 2

Activities of Professional Psychologist

- See private clients (who pay)
- Develop diagnostic tests & copyright them. Charge fees for response sheets, administration manuals, etc.
- Attend professional meetings: continuing education credits,
 - lunches, cocktail hours etc. sponsored by commercial businesses, publishers

Scientific and Professional (Business) Values - 2

Activities of Professional Psychologist

- Lobby gov' ts for regulation of profession (educational standards, provincial or national examinations)
- Lobby insurance companies for coverage
- Give professional seminars, public lectures (for a fee)
- Might supervise a student intern (gets free labor)
- *Charge for providing their knowledge*

Scientific and Professional (Business) Values - 3

- 1892 - American Psychological Association founded to “advance psychology as a science”
- 1945 - APA reorganized - Mission: “to advance psychology as a science, and profession, and as a means of promoting human welfare”.

Island Communities vs. Urbanization after 1890

- Before 1890 – small isolated agricultural communities
- Development of telephones, railroads → transported people & goods
- People moved to cities & worked in factories, dept. stores
- Large changes → big differences between lives of parents & children

Island Communities vs. Urbanization - 2

- Before 1890, people independent, self-sufficient
- After 1890 people were employed by factory or store owner
- By 1900 40% lived in cities
- Stronger social controls in small isolated communities; not so in large cities.

Island Communities vs. Urbanization - 3

- Americans felt they were losing control of their lives
- 1894 – 5: 1394 strikes, march on Washington
- 1896 – election Bryan (preacher of religious morality) vs McKinley (urban, pragmatic, voice of big business & labor)
- McKinley won

Island Communities vs. Urbanization

- 4

- Many immigrants to USA – living in cities
- Academics broke from Scottish (religious) school of psychology to adopt more scientific approach (see Chapters on Psych of Adaptation & Behaviourism)
- Freud – questioned sexual mores

Progressive Movement

- Enlightenment Project – to restructure society along rational scientific principles
- Reform, efficiency, progress
- Reign in “robber barons”, corrupt politicians who bought votes
- Progressives wanted disinterested expert professional government
 - Scientific management

Progressive Movement - 2

- John Dewey –progressive educational reform
- Immigrants needed to be Americanized; farm workers needed to learn new skills
- Education became mandatory; schools became new communities for children
- Schools must teach pragmatic values of community solidarity
 - Schooling mandatory

Progressive Movement - 3

- John Dewey: “ ...once psychologists understand [the scientific laws of human behaviour], they will be able to construct a more perfect society by substituting rational planning for haphazard growth.”
- Progressivism condemned tradition, tolerated religion
- →create society based scientific laws of human nature

Progressive Movement - 4

- Called for government by scientifically trained managerial elite → growth of gov't bureaucracy
- Progressives obsessed with social control of the "immigrant masses"
- Valued personal growth
- America's values: distrust of "aristocrats" (moneyed, hereditary, elected)

Progressive Movement - 5

- American Values: equal treatment of all
 - anti-elitism: no one is better because of wealth etc. or education
- Progressives wanted intellectual elite to govern
- Progressivism's legacy: gov't bureaucracy

Progressive Movement - 6

- Valued personal growth, striving towards perfection
- Individuals acquire personality & knowledge from society
- Individual should be developed to be in harmony with society
- Progressivism not consistent with American's individualism & libertariansim

Origins of Applied Psychology: Mental Testing

- Developed in interests of public education
England: Sir Francis Galton (1822 - 1911)
- Inheritance of mental traits - showed that some families pass certain traits along (e.g. athletic ability, criminal tendencies)
- Galton's student, Karl Pearson, developed the correlation coefficient
 - academic grades correlated → intelligence as a single trait

Origins of Applied Psychology: Mental Testing

- Galton wanted objective “scientific” measures of intelligence: sensory acuity, head size
- Anthropometric laboratory – ordinary people paid to be tested → beginning of professional model of psychology

Mental Testing - 2

France: Alfred Binet (1857 - 1911)

- 1904 - Govt commission to diagnose mentally subnormal & provide appropriate education
- Saw intelligence as higher mental processes rather than sensory processes.
- Tests used practical tasks involving thinking or knowledge in different situations.
 - determined ages at which normal children could do these tasks.

Mental Testing - 3

- No theory of intelligence
- Mentioned “diverse intelligences & also discussed “general” intelligence
- Wanted to separate “natural intelligence” from effects of instruction → still controversial issue

Mental Testing - 4

USA: Henry Goddard (1886 - 1957)

- Director of Vineland (New Jersey) Training School for Feeble-minded Boys and Girls
- Binet’s test used to distinguish low intelligence & disease
- Note: IQ tests used to select children for educational programs
 - Still use paper-and-pencil tests to select students for university programs

Mental Testing - 5

- Germany: William Stern (1871 - 1938)
- IQ - ratio of child's "performance age" to chronological age * 100

→ **Mental testing was the cornerstone of applied psychology**

Applied Psychology in the USA

- Influence of progressivism, pragmatism: Americans not interested in knowledge for its own sake, wanted knowledge that was useful & could improve society
- Functionalism: purpose of mind was to help organism adapt to environment
- Role of psychology was to help people adapt to their environment

The Galtonian Tradition in the US

James McKeen Cattell (1860 - 1944)

- Student of Wundt, worked with Galton
- 4th president of APA
- Saw mental tests as scientific tool to discover “consistency of mental processes, their interdependence, & their variation...”
- Used letter-span tests (number of letters which could be repeated after one presentation)

Galtonian Tradition - 2

Lewis Terman (1877 - 1956)

- Translated Binet’s test & adapted it – > Stanford Binet
- Believed intelligence was inherited – IQ testing would provide evidence
- Introduced digit span test
- Use IQ to place students in appropriate school programs. (Influence of progressivism)
- IQ tests to be used in prisons, reform schools

Galtonian Tradition - 3

- Terman – translated & adapted Binet's test
- Interested in identifying "gifted" children early
 - longitudinal study
- Interested in inheritance of intelligence

Galtonian Tradition - 4

Lewis Terman cont'd

- "... all feeble-minded are at least potential criminals."
- advocated eugenics policies to prevent the "feeble-minded" from reproducing

Hugo Munsterberg (1863 – 1916)

- Student of Wundt, succeeded James as Chair of Psychology at Harvard
- Motor theory of consciousness - feeling of will occurs because we are aware of our behaviour & incipient tendency to behave.
- *On the Witness Stand: Essays on Psychology and Crime (1908)* - advocated the use of psychology in legal situations.
- *Psychology and Industrial Efficiency (1913)* → anticipated Industrial & Organizational psychology
 - Finding best “man” for the job

Clinical Psychology

Lightner Witmer (1867 - 1956)

- Studied with Cattell & Wundt - taught school, taught child psych. courses to teachers.
- Founder of clinical psych & a founder of school psych.
- First psychology clinic - first graduate training program in clinical psychology (1896) at Univ. Pennsylvania
 - For examination & treatment of children and adolescents
 - First clinical case in psychology - dyslexic student.
- Founded a journal *The Psychological Clinic*

Clinical Psychology

- Clinical psychology defined by a method - mental testing.
 - applicable to children who deviate from the norm in any way (“morally retarded”, intellectually backward, dyslexic, but also the gifted & exceptionally bright)
- Mental testing - make the child’s education more appropriate to child’s needs and abilities.

Clinical Psychology - 2

- 1914: 19 university-based clinics,
- 1909: child-guidance clinic associated with juvenile court in Chicago
- 1908: first internship at Vineland Training School for Feeble-minded Boys and Girls directed by Henry Goddard
- Clinical psychologists began to work with patients in mental hospitals
- Psychological assessment → “work certificates” allowing teenagers to leave school to work

Clinical Psychology - 3

- Walter Dill Scott – advertising (1901) & personnel selection (1916)
- Self help books – *A Mind that Found Itself* – self help book by former mental patient
- John B. Watson - 1920 - fired from Johns Hopkins - wrote popular articles on psychology

Organizing Professional Psychology

- American Association of Clinical Psychologists (AACP)
 - founded in 1917 by J. E. Wallace Wallin
- Goals:
 - create a public identity
 - encourage research on “mental hygiene”
 - professional development, professional conferences
 - establish professional standards for the practice of psychology

Organizing Professional Psychology

- 2

- → APA created Clinical section;
 - planned to issue certificates to consulting psychologists & have qualifying examination. AACP dissolved, but ...
 - Resisting development of standards for clinical training and practice
- Tension between academic and practicing psychologists throughout 20th C.

Impact of World War I

- Bolshevik revolution in Russia (1917)
 - tension between Europe & US on one hand, and USSR on the other until 1990s.
- German - Prussian empire destroyed, ultimately Hitler and Nazis gained power in Germany → WWII
- Gov' t bureaucracies achieved little, WWI decimated male population in Europe & left people depressed & pessimistic
- USA did not join League of Nations (precursor to United Nations)

Impact of World War I

- Optimism of 19th C ended - loss of faith in authority (military and political leaders)
- Social control not achieved through reason.
- Americans had faith in social science and turned to psychology for answers

Psychology and the Great War (1914 - 1918)

- Robert Yerkes - comparative psychologist - President of APA when USA entered war (April 1917)
- APA formed 12 Committees concerned with different aspects of the war.
- Walter Dill Scott - Committee on Classification of Personnel of the War Department
- - Yerkes - committee on psychological examination of recruits - goal: to keep the “mentally unfit out of US Army

Psychology and the Great War - 2

- Scott & Yerkes did not get along
- Scott's Committee - developed rating scale for selecting officers for the military, developed proficiency tests for 83 military jobs
- Yerkes - developed 1st group intelligence test. Army Alpha (for literate recruits) and Army Beta (for illiterate recruits). Ss graded A, B, C, D, or E
- 700,000 men tested

Menace of the Feeble-minded

- Nearly half (47.3%) of drafted men were "morons" (mental age < 13; 16 considered normal)
- Ethnic & racial differences: English best, then Dutch, German, Danish & Scottish;
- Turks, Greeks, Russians, Italians & Poles next; African Americans worst.
- Galtonian belief that intelligence was innate & differences not erasable by education
→ Eugenics movement
- Increased status of mental tests because of their use in the war.
 - Some saw mental tests as foundation of scientific psychology

Menace of the Feeble-minded - 2

- Critique of Army tests: classifications arbitrary. Wanted best 5% for officers (As)
 - small sample of school students for norms
 - Army tests more indicative of average intelligence
- Terman: APA President 1924 - mental tests had great value, could address nature-versus-nurture issue
- Charles Spearman (Spearman correlation coefficient) - mental tests = scientific foundation for psychology
- Demand from educational institutions & corporations for army tests

Making America Safe

- Galtonians: recent immigrants & African Americans undesirable
 - Believed that “innate stupidity & ugliness” not fixable by education
 - Note contradiction with American empiricism
- Fear that intelligence of population was declining
- → Control immigration & prevent “undesirables” from breeding

Making America Safe

- Yerkes - supported immigration laws designed to select Nordic (white protestant) immigrants and reject others
- A. E. Wiggam - spokesman for racist Galtonians - wrote popular books - pseudoscientific rant
- “In a scientific age, bigotry adopts the language of science...”** (Leahey, page 464)
- Education no protection from bigotry

Making America Safe - 2

- Political pressure → immigration act 1924 - immigration numbers based on numbers in 1890 (before increases in non-nordic immigration occurred)
- American eugenics movement - racist
- British movement based on class, not race, & proposed positive eugenics - encouraged “best” to reproduce
- Irony: American constitution - “All men are created equal.”

Making America Safe - 3

Charles Davenport

- Supported by Carnegie Institution
 - Est'd lab at Cold Spring Harbor 1904 & Eugenics Records Office
- Alcoholics, feeblemindedness etc. inherited → pauperism & prostitution
- Prostitutes = morons, unable to inhibit “innate eroticism”
- Racist: believed different races had different characteristics
- Favored compulsory sterilization

Making America Safe - 4

Henry Goddard

- Director of Vineland School - leading eugenicist.
- Believed intelligence was innate
- Drew up family tree of vice, crime & stupidity – Kallikak family
- Concerned about “high-grade defectives” who pass for normal, marry & have families!
- Favored institutionalization of morons, idiots & imbeciles & sterilization

Making America Safe - 5

- Many states passed compulsory sterilization laws
- Supreme Court upheld constitutionality of sterilization laws
- Oliver Wendell Holmes wrote majority opinion in Carrie Buck case
- Member of the Metaphysical Club
- Progressivist, willing to hear scientific evidence

Making America Safe - 6

Critics of Eugenics

- Catholics - people are spiritual beings
- Biologists - 90% of subnormally intelligent children born to normal parents
 - “feeble-minded” could have normal children
- Civil libertarians - powerful would direct human breeding in their own interests

Making America Safe - 7

- Anthropologist Franz Boas - differences between ethnic groups cultural.
- Otto Kleinberg - No differences in intelligence between Nordic, Alpine, & Mediterranean people in Europe
 - Northern African Americans did better than those in south – better schooling
- Behaviourists
- 1928 - Goddard: feeble-mindedness not incurable

Making America Safe - 8

- 1930 - Thomas Garth - *Psychological Bulletin* – concluded that race differences in intelligence not supported
- Nazis had eugenics program to eliminate Jews and “defectives” → killed Eugenics movement
- Eugenics & genetic counseling → Leahey claims that people with heredity disorders encouraged not to have children, or to have prenatal testing
- Note: white supremacists still exist in US & Europe

Psychologists at Work

- Goal of progressives: efficiency through science
- Munsterberg – *Psychology & Industrial Efficiency* - 1913
- Frederick Taylor: *Principles of Scientific Management* -1911
 - Analysed jobs into simple mechanical routines → production lines
- Unhappy workers not productive

Elton Mayo – Hawthorne Study

- Workers assembled telephone relays.
 - varied many aspects of work (lighting, timing of rest periods etc). → productivity increased.
- Researchers concluded: workers responded to management interest in their work
 - Demand characteristics ???

Elton Mayo – Hawthorne Study - 2

- Just as schools became communities for children, work place became community for adults.
- Mayo: Replace ‘individualized’ work with communities of workers who found work meaningful
 - Use of personnel counselors to help people adjust to their work situation

Mayo: Hawthorn Study

- Hawthorne effect data reanalyzed by Bramel & Friend → ‘effect’ produced by replacement of unhappy, unproductive worker by enthusiastic productive worker.
- Critics of industrial psych argued that psychological manipulations redirected workers’ concerns over workplace conditions & wages (i.e. union issues) to “feelings”. Discontent = poor adjustment.

When Psychology was King: 1920s

- 1920's - psychology proving useful in industry, education, courts, military
 - People turned to psych to solve life's problems
- Excess faith in science & psychology (scientism)
- Scientism: (1) methods & attitudes typical of or attributed to natural scientists; (2) exaggerated trust in methods of science as applied to all areas of investigation (especially human sciences)

When Psychology was King - 2

- Scientism and psychology replaced religion.
 - Modernists tried to reconcile science with the Bible
 - *Fundamentalists* tried to subjugate science (Darwinism) to religion
- People separated from “old” rural life & values
- Look to psychology – how to live “good life”, run a business, bring up children etc.

When Psychology was King - 3

- First popular wave of ψ was Freud
- Freud killed victorian sexual morality
 - Sexual repression breded neuroses
- Post war (Jazz Age) – many had lost peers
 - attitude was 'have fun while you can'
 - First generation of urban youth – spent time with peers, not parents
 - youth culture, peer pressure

When Psychology was King - 4

Behaviourism - John B. Watson

- Fired from Johns Hopkins, wrote articles for magazines
- Had a nervous breakdown in grad. school. Received psychoanalysis.
- Freudian psychoanalysis: “substitution of demonology for science”
- Anti-religious:
 - consciousness = masquerade for the soul
 - Church kept people under control through belief in “soul” & afterlife.

When Psychology was King - 5

John B. Watson, cont' d

- Offered advice & opinions, child-rearing advice (His book sold well.)
 - punitive approach
 - Advocated having professionals raise children
- Empiricist - no innate instincts, personality, intelligence
- Attacked eugenics - believed people could be trained for anything, no inferior races - not racist

When Psychology was King - 6

John B. Watson, cont' d

- Wannabe evangelical preacher - knew power of emotions to motivate people
- John Albert Broadus (evangelical Baptist preacher): reason not basis for morals.
 - Need fear to make people behave.
 - Use language to manipulate emotions
- Watson's 2nd career - advertising executive
 - Used fear to get people to buy products
- Advertising created fear → need for psychologists to solve human problems.

When Psychology was King - 7

- Note how psychologists gave advice even though psychological science did not justify their claims
- Watson unethical – Little Albert
 - Read MacLeans' article
- Progressives liked behaviourism
 - Provided method for controlling behaviour

Flaming Youth

- 1920s – Jazz Age
- Youth of “Roaring 20s” rebelled
- Many young men killed in war
 - rejected notion of ‘serving one’ s country’ & just wanted to have fun.
- Rejected religious & traditional views of parents
- Lived in urban centres – family weakened.
 - Parents worked in offices & factories.
 - Children at school, not doing chores
 - parents turned to psychologists

Flaming Youth - 2

- Role of parents & family changed
 - Family no longer economic unit
- Function of family: raise well adjusted children
- Mothers must be “psychotherapists” who needed to be trained by psychologists.
- Need for child psychologists

Flaming Youth - 3

- Youth culture - parents lost control of children who turned to peers
- Peer values: good personality, fitting in with peers, fitting in with your group, being sociable
 - Personal satisfaction, not achievement
 - Expressing one's deep feelings, being true to one's "real self"
 - Rise of sororities & fraternities who enforced group values
 - Centered on self esteem rather than accomplishment

Flaming Youth - 3

- Margaret Mead - *Coming of Age in Samoa*
- Described idyllic life on tropical island
 - 'Natural' life (i.e. sexual freedom),
 - avoidance of strong feelings and attachments
 - Similar to hippie movement of 60's
 - Mead's work later discredited
- Anthropologists (Boas & others) saw human nature shaped by culture
 - Job of social scientists to remake culture

Flaming Youth - 5

■ Note contrasts:

- 1) Dewey, behaviourists, progressives: wanted social control, believed in importance of education & training based on scientific principles; empiricist
- 2) Eugenic movement: believed in innate intelligence
- 3) Youth culture: be true to the group values, be sociable, fit in, be yourself
 - compare to hippie movement of 1960s
- 4) Anthropologists: culture determined everything; *laissez-faire* attitude, permissive

- End of Lecture