

## Lecture 3: Paradigms and Contemporary Issues

### How the Discipline's Future can Explain its Past

#### I. INTRODUCTION

##### A. Issues and Goals

- Contemporary psychology is ambiguous
  - It is diverse, with old tensions and new currents
  - Diversity: Psychology is broad tent of theories and approaches.
    - Psychologists in many WSU departments other than Psychology.
  - Old Tensions: The old tensions between scientific psychologists and those who are nonscientific or applied remains.
    - History of Clinical Psychology very revealing!
  - New Currents: New movements extend ideas but increase diversity and tension in the field.

#### I. INTRODUCTION

##### B. Connecting Psychology Past to its Present

- The contemporary picture looks nothing like it should!
  - Ideally, contemporary psychology should be the *progressive* result of discipline's history.
    - Progressive means a philosophically rational process of conceptual change
      - Newer paradigms resolve anomalies of older ones.
  - A general progressive account of the history of psychology has not been accepted.
    - There are progressive accounts of local changes, which ironically may come from applied psychology (mental testing, diagnostic techniques, treatment outcomes) whose scientific status has been questioned.

#### I. INTRODUCTION

##### B. Connecting Psychology Past to its Present

- One account holds that there is a progressive sequence between three forces in psychology.
  - Psychoanalysis: (First Force) 1890 -1930s
    - We all succumb to the will of an all powerful unconscious
  - Behaviorism: (Second Force) 1930s -1960s
    - Humans are like all other animals in being pawns of the environment
  - Humanism: (Third Force) 1960s -
    - Humans are naturally good and naturally strive to be the best.

## I. INTRODUCTION

### B. Connecting Psychology Past to its Present

- Another account holds a progressive relation between three paradigms.
  - Mentalism: 1879
    - Psychology born as a science of consciousness using introspection (Wundt, Titchener)
  - Behaviorism: 1913
    - Rejected the science of mental life in favor of a science of behavior (Watson, Pavlov)
  - Cognitivism: 1956
    - Science of behavior for a computational (information-processing) science of mind (Lashley, Chomsky, Simon, Miller)

## I. INTRODUCTION

### C. Problems with Conceptual Revolutions

- Leahey (1992) was skeptical that either sequence reflects a conceptual revolution.
  - The Behaviorist ascension in the early 1920s was not a fight against (or replacement of) another paradigm
  - Multiple paradigms existed and flourished early in the 20<sup>th</sup> Century.
    - Mentalism (conscious mind)
    - Functionalism (purposive actions)
    - Psychoanalysis (unconscious influences).
  - A methodological not ontological debate.

## I. INTRODUCTION

### C. Problems with Conceptual Revolutions

- Even the changes in the 1960s may not reflect a paradigm shift.
  - To Leahey, cognitivism's ascension represented mentalism's marriage with behavioral issues.
    - Cognitivism did not replace behaviorism but represents continued basic work of mediated S – R models
    - Also, old mentalism on such issues of sensation, perception, and attention was augmented with new work on language, reasoning, and decision-making.
  - Humanistic psychology did not replace behaviorism but offered other treatment options than behavior modification.

## I. INTRODUCTION

### C. Problems with Conceptual Revolutions

- Koch (1982) was skeptical of the validity of any progressive model to account of psychology's history.

When the details of psychology's 100-year history are consulted, the patent tendency is toward theoretical and substantive fractionation (and increasing insularity among the "specialties"), not integration. As for the larger quasi-theoretical "paradigms" of psychology, history shows that the hard knowledge accrued in one generation typically disenfranchises the regnant analytical frameworks of the last.

## I. INTRODUCTION

### C. Problems with Conceptual Revolutions

- He argued that any ordering of the history of psychology was “morally bankrupt.”

In the psychological studies, the attribution to any paradigm of a preemptive finality has the force of telling human beings precisely what they are, of fixing their essence, defining their ultimate worth, potential, meaning; of cauterizing away that quality of ambiguity, mystery, search; that makes progress through a biography an adventure.

## I. INTRODUCTION

### D. The Present in an Historical Perspective

- a broad progressive account connecting psychology’s past to its present is premature.
  - What gets written about psychology’s past depends on whether or not the diversity, tensions, and new currents are ever reconciled.
    - The greater diversity and tensions introduced by new currents may force unification or more disunity.
- We will consider whether psychology is on a pathway towards unification or disunity.
  - The account of psychology’s history may depend on how the future resolves.

## II. DIVERSITY OF PSYCHOLOGY

### A. State of the APA

- American Psychological Association (APA) is the national organization of psychology.
  - Founded in 1892 with a handful of charter members.
  - Today there are 85,000 members who can be registered in 54 divisions representing diverse areas of interests and specialties.
- The history and present state of the APA reveals much about the discipline.
  - No hostility among the different schools of thought in APA, reflecting a spirit of eclecticism

## II. DIVERSITY IN PSYCHOLOGY

### B. Tensions

- The diversity of psychology also creates tensions which include:
  - Science versus Application in psychology
    - The focus on science vs. practice may be naturally irreconcilable in psychology due to personality and conceptual issues
  - History of Clinical Psychology in the APA
    - There has been a long tension between applied and scientifically oriented psychologists in the APA.
  - The Training of Clinicians
    - The APA standard of scientist-practitioner training (Ph.D.) is being challenged by Psy.D. degrees.

### III. OLD TENSIONS IN PSYCHOLOGY

#### A. Science vs. Application

- The goals of science vs. application are antagonistic
  - Applied psychologists focus on practicing psychology in order to heal or help people.
  - Scientists are focused on testing ideas in order to prove them right or wrong.
- But in medicine, medical doctors who treat people are also biomedical scientists.
  - But medical doctors and biomedical scientists may each accept the disease or medical model which is not universally shared in psychology.

### III. OLD TENSIONS IN PSYCHOLOGY

#### B. Science vs. Application

- The tensions between practitioners and sciences are old!
  - From its inception, there was always a tension those wanting psychology to be a pure science (Wundt, Titchener) and those wanting psychological applied to practical matters (such as Hall, Cattell, and Münsterberg).
  - The founding of the APA did not decrease this tension.
  - Titchener refused to participate in any of APA's activities.
    - He created his own organization, *The Experimentalists*

### III. OLD TENSIONS IN PSYCHOLOGY

#### C. Practitioners vs. Scientists

- Temperament differences between practitioners and scientific psychologists.
- James (1907) divided philosophers into:
  - **Tender-minded** (Principled, Intellectualistic, Idealistic, Optimistic, Religious, Free-will, Dogmatic) temperament
    - characterizes members of the humanities (Snow, 1984)
  - **Tough-minded** (Fact-based, Sensationalistic, Materialistic, Pessimistic, Irreligious, Fatalistic, Skeptical) temperament
    - characterizes scientists (Snow, 1984)
- Because of the differences, communication between the two groups is challenging.

### III. OLD TENSIONS IN PSYCHOLOGY

#### C. Practitioners vs. Scientists

- Other differences between practitioners and scientists in psychology.
  - Kimble (1984) found that experimental psychologists tend to be tough-minded and humanistic psychologists and psychotherapists tend to be tender-minded.
  - Dawes, Faust, & Meehl (1989) identified different ways clinicians and scientists make judgments and decisions.
    - Consider how you would prefer to be evaluated for a grade in the course:
      - Subjective judgments of the professor.
      - Objective evaluation of course performance (tests, etc.)

### III. OLD TENSIONS IN PSYCHOLOGY

#### C. Practitioners vs. Scientists

- Dawes et al., (1989) characterized the difference in terms of the methods each prefers to make judgments and decisions.
- **Clinical judgments** are performed in one's head often using "intuitive knowledge", "clinical impressions", or "subjective reactions"
- **Actuarial or Statistical judgments** rest solely on empirical relations between data and the condition or event. No intuitions, impressions or reactions; just using data to make judgments.

### III. OLD TENSIONS IN PSYCHOLOGY

#### C. Practitioners vs. Scientists

- Differences found between the methods
  - Goldberg (1972) found that clinical judgments were correct 62% whereas actuarial judgment were correct 70% of the time when making distinctions between psychosis vs. neurosis.
    - Even training the clinicians in the actuarial rules did not improve their performance.
    - Clinicians' were unreliable in their patterns of judgments.
  - Leli & Filskov (1970) studied the diagnosis of brain dysfunction based on intellectual testing.
    - The statistical judgments was correct 83% of new cases but clinicians were correct 63% (experienced) and 58% (inexperienced) of the new cases,

### III. OLD TENSIONS IN PSYCHOLOGY

#### C. Practitioners vs. Scientists

- Why are clinical judgments worse than actuarial ones?
  - Actuarial procedures, unlike clinical ones, always lead to the same conclusion for a given data set.
    - Factors as fatigue, recent experience, or seemingly minor changes in the ordering of information or in the conceptualization of the case or task can produce fluctuations in judgment.
  - Actuarial methods ensure that variables contribute to conclusions based on their actual predictive power and relation to the criterion of interest.
    - Actuarial decision rules eliminate the non-predictive variables, and weight predictive ones in accordance with their independent contribution to accurate conclusions.

### III. OLD TENSIONS IN PSYCHOLOGY

#### C. Practitioners vs. Scientists

- Why clinical are worse than actuarial judgments
  - Clinicians often obtain little or no information about the accuracy of judgments.
    - Clinicians often can not find out whether they are "right" and outcomes are easily distorted (Rosenhan, 1972)
  - On this note, clinical judgments produce "self-fulfilling prophecies."
    - Prediction of an outcome often leads to decisions that influence or bias that outcome (32).
  - Clinicians are exposed to skewed samples making it difficult to determine relations among variables.
    - Co-occurrence of certain features (EEG abnormalities) in a skewed sample (only juvenile delinquents) does not make the feature a predictive of that sample.

### III. OLD TENSIONS IN PSYCHOLOGY

#### C. Practitioners vs. Scientists

- Clinicians are over-confident about their clinical judgment.
  - Research shows that clinical judgments are made with more confidence than their accuracy warrants (Dawes, 1998)
    - Faust et al., (1988) found that most clinicians were quite confident in their diagnosis although not one was correct.
- An anti-actuarial claim is that group statistics don't apply to single individuals or events.
  - Although individuals and events may exhibit unique features, they typically share common features with other persons or events that permit predictive power.
    - By this logic, one would be willing to play Russian roulette with a gun having a single or multiple bullets.

### III. OLD TENSIONS IN PSYCHOLOGY

#### D. History of Clinical Psychology

- In 18<sup>th</sup> C America, mental illness was seen as an acute illness, curable if therapy was early.
- The first mental asylum in the US was open in 1750s in Philadelphia.
  - Practiced *moral therapy* which involved individually tailored activities.
  - By mid 1950s, asylums (now state hospitals) were disbanded as they had become warehouses of failed patient management.
- Research to promote therapy and diagnosis in asylums began in the late 1880s.
  - Mental testing in asylums and out becomes popularized by J. M. Cattell & R. Jastrow.

### III. OLD TENSIONS IN PSYCHOLOGY

#### D. History of Clinical Psychology

- 20<sup>th</sup> C marks the beginning of clinical psychology.
- *Clinical Psychology* coined in 1907 by Witmer who also edited journal *Psychology Clinic*.
  - Mental testing, specifically intelligence testing, by psychologists becomes widespread during WWI.
- Freud and Jung visited Clark University in 1909 and gave lectures about Psychoanalysis.
  - MDs believed that psychotherapy should be practiced exclusively by doctors.
- Social movements brought attention to mental health issues (National Committee for Mental Hygiene).

### III. OLD TENSIONS IN PSYCHOLOGY

#### D. History of Clinical Psychology

- Clinical Psychology became a part of the American Psychology Association (APA) in 1919
  - APA Founded in 1892 as a society to promote the science of psychology.
    - Clinicians were not welcomed and later withdrew for a period of time, creating their own association
  - It is not until 1944 that APA fully embraced clinical psychology, becoming responsible for clinicians' credentialing and training requirements
    - To reconcile with clinicians, APA changed its stated purpose to include psychology as a profession and a means of promoting human welfare.



### III. OLD TENSIONS IN PSYCHOLOGY

#### D. History of Clinical Psychology

- APA addressed its new responsibility for credentialing and training clinical psychologists
  - David Shakow chaired an APA committee to create the curriculum.
  - The committee completed a report in 1947 which contained a set of undergraduate and graduate curriculum recommendations for clinical psychologists.
    - The 1947 statement made clear that clinical psychology is “both a science and an art calling for scientific rigor tempered by personal and social sensitivity.”

### III. OLD TENSIONS IN PSYCHOLOGY

#### D. History of Clinical Psychology

- But university Psych Depts. were reluctant of have APA control their curricula.
  - Harvard, Columbia, and others still have Clinical Programs in their School of Education (Ed.D vs. Ph.D.)
- A 1949 meeting was held in Boulder Colorado to implement the new curriculum.
  - Shakow and 73 others representing universities and other disciplines hammered out a set of specific proposals for the training and practice of clinical psychology.
  - The resulting view of psychological practice was the Boulder (or Scientist-Practitioner) Model.

### III. OLD TENSIONS IN PSYCHOLOGY

#### D. History of Clinical Psychology

- The agreed upon Boulder Model was designed to insure that clinical psychologists...
  - use scientific methodology in their practice
  - work with clients using scientifically valid methods, tools, and techniques
  - inform their clients of scientifically-based findings and approaches to their problems;
  - conduct practice-based research.

### III. OLD TENSIONS IN PSYCHOLOGY

#### D. History of Clinical Psychology

- There remains a split between psychologists oriented to clinical vs. scientific aspects of the discipline in the APA.

APA continued to evolve into an organization in which the applied members began to outnumber the research-oriented psychologists.

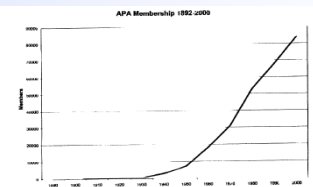


Figure 2.1  
This chart, showing the growth of APA membership since the founding of the association in 1952, dramatically illustrates the impact of World War II on American psychology.

### III. OLD TENSIONS IN PSYCHOLOGY

#### D. History of Clinical Psychology

- In the past, it was the clinicians in APA who were unhappy, now it is the scientists.
- In the 1960s, a group of scientific psychologists left the APA and formed their own organization
  - The Psychonomic Society
- In 1989 another group of psychological scientists organized the APS (American Psychological Society)
  - APS is now called the Association for Psychological Science.
- This tension between practitioners and scientists is no better today as it was 120 years ago!

### III. OLD TENSIONS IN PSYCHOLOGY

#### E. The Ph.D. vs. Psy.D Degrees

- Clinicians have pushed back!
  - Clinicians have some not-so-kind thoughts about the value of the scientific training in the Boulder Model.
  - These clinicians argue that same person should not be trained in applied & pure work.
    - There is no valid reason for clinicians to train in pure science.
    - They do little science once becoming clinicians
    - Talent and interest in applied work is incompatible with talent and interest in scientific work.
- The scientist-practitioner model does not produce many scientist-practitioners.

### III. OLD TENSIONS IN PSYCHOLOGY

#### E. The Ph.D. vs. Psy.D Degrees

- The scientist-practitioner model may be the problem!
  - There is no evidence that handful of research courses in graduate school are sufficient to develop competent scientists.
  - Clinical- and science-oriented professors in Boulder Model schools do not value clinically oriented research (the topic of interest to clinical students).
    - The scientists think that the research lacks sufficient controls .
    - The clinicians think that controls that are exerted makes the research invalid.
- Not many scientist-practitioners in the profession.

### III. OLD TENSIONS IN PSYCHOLOGY

#### E. The Ph.D. vs. Psy.D Degrees

- Clinicians do not dismiss science!
  - Everyone agrees that clinical psychology need a solid background in the basic science.
  - Such background is trained in undergraduate and graduate psychology courses (Methods and Statistics)
  - However, the question is whether clinicians should conduct their own research as required by the schools employing the Boulder Model.
- They distinguish between those who want to find generalities about *all* people (scientists) and those who want to help *a* person (humanist).



### III. OLD TENSIONS IN PSYCHOLOGY

#### E. The Ph.D. vs. Psy.D Degrees

- Some conclude that political forces (not sound reasons) was the cause of adding a research requirement to the Boulder Model.
  - An alternative to the Boulder model was first instituted at the University of Illinois in 1968
  - Instead of a science-practitioner model, the alternative was a scholar-practitioner model
- The model proposed training psychologists without the research requirement.
  - The tents of the new model were ratified at a meeting in Vail Colorado in 1973,
  - The Vail Model promoted a professional program like other disciplines.

### III. OLD TENSIONS IN PSYCHOLOGY

#### E. The Ph.D. vs. Psy.D Degrees

- Several features differentiate the Vail from Boulder models:
  - Training is more strongly focused on clinical practice than either of the other two.
  - The programs usually grant a Psy.D. degree rather than a Ph.D. or Ed.D.
  - Admissions criteria may place more of an emphasis on personal qualities and clinically-related work experience.
  - These programs are housed in a greater variety of institutional settings than are research scientist or scientist-practitioner programs.

### III. OLD TENSIONS IN PSYCHOLOGY

#### E. The Ph.D. vs. Psy.D Degrees.

- The students interested in psychology is left to decide between two types of programs.
  - The different programs designate the scientist role (Ph.D.) from the practitioner role (Psy.D.).
    - Acceptance rate for students are higher in Psy.D. (40%) than Ph.D. (13%) programs.
    - Psy.D. offers less financial assistance than Ph.D. programs and students graduate with more debt.
    - Students in Ph.D. programs graduate later than students in Psy.D. programs.
    - PsyD graduates do not perform as well as PhD graduates on the Examination for Professional Practice in Psychology (EPPP).

### IV. NEW CURRENTS IN PSYCHOLOGY

#### A. Sources of New Ideas

- New ideas come into psychology a variety of places which include...
  - Technological innovations
    - These technologies provide measurement accuracy and even metaphoric applications.
  - New funding priorities
    - New research open new investigations and theories.
  - New intellectual traditions
    - These can be from outside or inside psychology
- There has been some of each in the last couple of years in psychology

#### IV. NEW CURRENTS IN PSYCHOLOGY

##### B. Technological Innovations

- Technological changes include computer technologies and biomedical equipment.
  - Supercomputing alternative to the serial computer
    - Parallel Distributive Processing models of cognition and reasoning became popular in the 1990s, which provide analogues of neural networks (Dual Process Theory).
  - Brain scanning and gene sequencing technologies provided new ways of examining biological basis of behavior.
    - MRI and FMRI allow real time brain scanning of various activities to better understand mind body relations.
    - Gene sequencing allows for better understanding heritability.

#### IV. NEW CURRENTS IN PSYCHOLOGY

##### C. Funding Changes

- New funding focus on Positive Psychology
  - Positive Psychology is the scientific study of the strengths and virtues that enable individuals and communities to thrive.
    - Research on happiness and other positive emotions, resilience, living the good and meaningful life.
  - It began in 1998 when *Martin Seligman*, the father of the modern positive psychology movement, chose it as the theme for his term as APA president and found financial support to promote research.
  - Extension of the Humanistic and Phenomenological perspective in psychology.

#### IV. NEW CURRENTS IN PSYCHOLOGY

##### D. Intellectual Currents

- Postmodernism is a movement from the Social Sciences and Humanities
  - Postmodernism, or social constructionism, holds that “reality” is created by individuals and groups within various personal, historical and cultural contexts.
    - “truth” is always relative to cultural, group, and personal perspectives.
  - The socio-cultural contextual view in psychology is largely based on postmodernism.

#### V. FUTURES OF PSYCHOLOGY

##### A. Issues

- How the diversity, tensions, and current trends of contemporary psychology are addressed will be a basis to define the past.
  - One the one hand, with greater diversity and tension, there is more of a opportunity to unify psychology.
    - Phenomenon-based inquiry will allow for the unity of multiple perspectives (Sternberg & Grigorenko, 2001)
    - Biopsychosocial models have address complex interactions between multiple incompatible variables.
    - Psychological theories adopt different design stances so collectively they view human beings as multipurpose.

## V. FUTURES OF PSYCHOLOGY

### A. Issues

- But the future may hold greater disunity
  - Some disunity trends accelerating: Separated psychology departments.
    - Most would agree that psychology is still a fragmented collection of different facts, theories, assumptions, methodologies, and goals.
  - James assessment in 1885 holds true today. This is not a science, only a hope for a science.
    - But now, not all psychologists adopt a deterministic view of human beings, necessary for a unity-in-science view of the discipline.