Introduction to Psychology

# OUTLINE OF RESOURCES

## Introduction

*Classroom Exercise: Exit Tickets (p. 2)*

## The Scientific Attitude and Critical Thinking

*Lecture/Discussion Topics: Your Teaching Strategies and Critical Thinking† (p. 3)*

*Critical Thinking (p. 3) (Also applies to Biases in Thinking in the Thinking*

*Critically With Psychological Science unit)*

*Classroom Exercises: A Psychic Reading (p. 2)*

*Critical Inquiry and Psychology† (p. 3)*

*Student Project: Evaluating Media Reports of Research† (See the Thinking Critically With Psychological*

*Science unit, where this discussion deals with the scientific method and critical thinking)*

*Macmillan Videos: What Is Psychology?*

*Critical Thinking*

## The History of Psychology

**Psychology’s Early Roots**

*Lecture/Discussion Topics: Psychology’s First Experiments (p. 6) History of Psychology (p. 6)*

*William James—Founding Father of American Psychology (p. 7) Classroom Exercise: Eminent Psychologists (p. 9)*

*Student Project: Today in the History of Psychology (p. 9)*

**Psychological Science Develops**

*Student Project: Notable Figures in Psychology (p. 9)*

*Student Project/Classroom Exercise: If a Notable Figure in Psychology Tweeted (p. 9)*

*Student Project/Lecture/Discussion Topic: The Twentieth Century’s Most Eminent Psychologists (p. 10) Lecture/Discussion Topic: Freud Audio Recording (p. 9)*

*Classroom Exercise: Psychology as Science (PAS) Scale (p. 10) PsychSim 6: Psychology’s Timeline (p. 9)*

*Macmillan Videos: The History of Psychology*

*Postpartum Depression: The Case of Andrea Yates*

## Contemporary Psychology

**Issues**

*Classroom Exercises: The Scientific Approach (p. 10)*

*Self-Assessment on Some of Psychology’s Big Issues (p. 11) Is Human Nature Fixed or Changeable? (p. 11)*

**Culture, Gender, and Other Influences on Behavior**

*Classroom Exercise: Gender Roles (p. 13)*

*Lecture/Discussion Topics: Differences in Cultural Norms (p. 12) Systemizing and Empathizing Brains (p. 13)*

*Macmillan Video: Does Self-Confidence Intimidate Others?*

**Perspectives**

*Lecture/Discussion Topics: Illustrating Psychology’s Complementary Perspectives: The Case of Andrea*

*Yates (p. 13)*

*The Biopsychosocial Approach and Obesity (p. 14) The Allure of the Neuroscience Perspective (p. 14) Complementary Perspectives (p. 16)*

*Human Freedom and Choice (p. 17)*

1

*Classroom Exercise: Metaphors and Psychology’s Perspectives (p. 15)*

*Classroom Exercise/Student Project: Applying Psychology’s Specific Theoretical Perspectives (p. 15)*

**Subfields**

*Lecture/Discussion Topics: Psychology’s Important Role in Basic Scientific Research (p. 19) Psychology’s Applied Research (p. 19)*

*Classroom Exercises: Psychologist as Scientist (p. 18)*

*Personalizing Psychology in Current Events (p. 18) Classroom Exercise: Categorizing Professions in Psychology (p. 21)*

*Student Projects: Exposure to the Fields of Psychology (p. 18) Interviewing a Psychologist (p. 18)*

*Macmillan Videos: Industrial-Organizational (I/O) Psychology: Psychology in the Workplace*

## Study Tips

*Classroom Exercise: Eliciting “Metaphors” for Learning and Teaching (p. 21)*

The Macmillan videos listed above are not described within these Instructor’s Resources. See your Macmillan online course for more information. (See LaunchPadWorks.com if you don’t yet have a Macmillan online course.)

RESOURCES

## Introduction

### Introductory Exercise: Fact or Falsehood?

The Preface to these Instructor’s Resources includes suggestions on how to use the Fact or Falsehood ques- tionnaires that are provided in the Lecture Guides that accompany the Myers’ text. These questionnaires are intended to stimulate student interest in the topic; they may also be used as a quick review.

*Classroom Exercise: Exit Tickets*

To master any subject, we must actively process it. It is probably wise to tell students from the outset that you intend to put that principle into practice in the

classroom in a variety of ways. For example, classroom exercises and demonstrations, student projects, small- group discussions, and student debates are all designed to encourage active learning.

Exit tickets are a common formative assessment technique for use in modifying teaching and learning activities so students are better able to understand class material (“The Exit Ticket,” n.d.). At the end of class, students respond to a question or two, in writing, about the material covered in that class session, perhaps tied

to previously learned content. You could ask more glob- al questions, such as “What was the most difficult con- tent in today’s class?” or “Identify at least one question you have about today’s material.” You can then devote the first part of the next session to a discussion of the issues raised by students. Not only does this give you time to think about students’ questions and concerns, it also gives you a chance to review the highlights of the previous day’s presentation. Equally important, you will have a very good idea of how well students comprehend

your lecture. In addition, or instead, you may employ an admission ticket whereby students arrive in class with

a written response to a question you posed about the material to be read for that day’s class session. Grading these can be simple: did it (1 point)/did not do it (0 points) or more elaborate: did it well (2 points)/did it (1 point)/did not do it (0 points).

The teacher toolkit. (n.d). The exit ticket. Retrieved December 1, 2016, from theteachertoolkit.com/index. php/tool/exit-ticket

Brown University. (n.d.). *Sample exit tickets.* Retrieved December 1, 2016, from brown.edu/about/administration/ sheridan-center/teaching-learning/effective-classroom- practices/entrance-exit-tickets/sample.

## The Scientific Attitude and Critical Thinking

### Classroom Exercise: A Psychic Reading

The question, “Can some people demonstrate ESP?” provides a good introduction to a discussion of the scientific attitude. Magician James Randi exemplifies skepticism because he has tested and debunked a variety of psychic phenomena.

Timothy Lawson suggested a psychic-reading demonstration that encourages students to approach the world of behavior with a scientific attitude—a curious skepticism. The demonstration specifically aims to fos- ter critical thinking. Certain to impress your students the first or second week of class, the psychic reading relies on “cold-reading” (providing general descriptions that apply to most people) and “hot-reading” (obtaining spe- cific details about the “volunteer” in advance).

Suggest that you are going to do a psychic read-

ing in class and that you need a “volunteer.” Act as if you are choosing a student randomly (e.g., “Let’s get someone from the first row”) but make your choice ahead of time. Have the student come forward and hand you some personal possession—a pen, dorm or car keys—and concentrate intently. Make some gen- eral descriptive statements that would apply to most people—“You are outgoing at times, but reserved at

other times,” “You are fairly even-tempered, but some- times get very angry,” “You enjoy helping others.”

Then slowly reveal more detailed information; do so bit by bit as if it is coming gradually to you and only with considerable effort. Begin with vague information that becomes more specific (e.g., “I see the letters WR, what does that mean? Did you play wide receiver?”) In one reading, Lawson disclosed that one of his students grew up in a single-parent household, was once the captain

of his high school’s cross-country team, won a Burger

King A+ Award for his cross-country achievements,

and suffered a broken leg when hit by a truck as a child. Your accuracy will shock and amaze most students.

How is it done? Lawson explained that it’s simply a matter of obtaining detailed information about a stu- dent or two before class. To avoid invasion of privacy, he recommends using only public sources of informa- tion. The Internet contains a wealth of information. Check Facebook, Twitter, or whatever social media upstart is current at the time you are reading this. Often, it is easiest to find information about student athletes.

After the reading, have students form small groups to evaluate the “reading.” Ask them to determine (a) if a target person’s acknowledgment of the accuracy of a

reading is good evidence for psychic ability, (b) wheth- er there are alternative explanations for the accuracy of the reader’s statements, and (c) how they might design

a test for psychic ability.

In discussing the demonstration, admit you are not psychic. After careful reflection, some students (and small groups) are likely to note that you made vague statements that apply to most people. Others will state that you could have obtained information about the target person in advance. Explain how you obtained the information. Suggest that one could test a psychic by asking questions about which the psychic would have no information (e.g., the student’s favorite high school teacher). Lawson also recommends that you inform students that your search for information was restricted to one or two students, included only publicly avail- able sources, and was performed only for purposes of the demonstration. Finally, admit that the demonstra- tion required temporary deception, an important ethical issue in the conduct of research with humans.

Lawson, T. J. (2003). A psychic-reading demonstration designed to encourage critical thinking. *Teaching of Psychology, 30,* 251–253.

### Lecture/Discussion Topic: Your Teaching Strategies and Critical Thinking

The study of psychology can help us to think critically. In class, you might note how the scientific approach can help us evaluate competing claims and ideas regarding phenomena ranging from subliminal persuasion, ESP, and mother-infant bonding to astrology and basketball streak-shooting. Explain that an important goal of the course is to teach questioning thinking that examines assumptions, appraises sources, discerns hidden values, evaluates evidence, and assesses conclusions.

*Teaching Critical Thinking in Psychology: A Handbook of Best Practices* (Dunn, Halonen, & Smith,

2008) is an excellent resource for the classroom. The book covers a wide range of topics, including why we should teach critical thinking in psychology and how to assess critical thinking. It also provides nine concrete examples of how to teach critical thinking to your students.

Dunn, D., Halonen, J. S., & Smith, R. A. (2008). *Teaching critical thinking in psychology: A handbook of best practices.* Chichester, West Sussex: Wiley- Blackwell.

### Classroom Exercise: Critical Inquiry and Psychology

The text gives specific examples of how psychology’s critical inquiry has produced surprising findings that have sometimes debunked popular beliefs. The Fact or Falsehood? exercise provided in the Lecture Guides that accompany your text provides many more; if you did

not use it earlier, you may choose to do so now.

### Lecture/Discussion Topic: Critical Thinking

There are many sources of information about and activ- ities regarding critical thinking. Here are some good ones.

Mark Forshaw’s *Critical Thinking for Psychology: A Student Guide* (2012) comes with real-world exam- ples and exercises appropriate for both discussions and assignments. He devotes an entire chapter to how a stu- dent can use critical thinking to get better grades.

*Critical Thinking in Psychology* (Sternberg, Roediger, & Halpern, 2006) explores critical thinking

as it applies to conducting psychological research. How can we use critical thinking to evaluate the quality of

a theory? Why is critical thinking important in clinical practice? While the focus of this book is on the con- ducting, reporting, and ethics of research, it will pro- vide you with a wealth of material to share with your students throughout the course.

*Psychobabble and Biobunk: Using Psychological Science to Think Critically About Popular Psychology* (2011) is a collection of Carol Tavris’ book reviews that demonstrate how critical thinking and psychologi- cal science can be put to good use when examining

popular culture. She also tackles the perception that if we can see something in a brain scan, it is meaning- ful. Watch her 54-minute talk at the 2012 Association for Psychological Science Convention titled “How

to Spot Pseudoneuroscience and Biobunk” (vimeo. com/45454490).

Dan Ariely’s *Predictably Irrational: The Hidden Forces That Shape Our Decisions* examines how our expectations, emotions, social norms, and other invis- ible, illogical factors distort our reasoning abilities. How, for example, did we ever start spending $4.15 for a cup of coffee when, only a few years ago, we paid less than a dollar? Why do we splurge on a lavish meal but use coupons to save $0.25 on a can of soup? Why

do we go back for second helpings at the unlimited buf- fet when our stomachs are already full? Why do our headaches continue after taking a 1-cent aspirin but

go away when we take a 50-cent aspirin? Our wrong- headed decisions are neither random nor senseless, argues Ariely, but are systematic and predictable. Most important, Ariely explains how we can learn to think critically to make better decisions.

In *Intuition: Its Powers and Perils,* David Myers tries to enhance readers’ powers of critical thinking. “When forming judgments and making decisions—in business, politics, sports, religion, and other everyday realms—discerning people,” Myers suggests, “will wel- come the powers of their gut wisdom yet know when to restrain it with rational, reality-based critical thinking.” He discusses the powers and perils of intuition when judges and jurors make judgments about truth-telling; when mental health workers predict whether someone

is at risk for suicide; when coaches, players, and fans decide whether a basketball player has the hot hand; when personnel directors must evaluate job applicants for a new position; and when psychics claim to be clair- voyant or to have precognitive powers. Our intuitions provide us with useful insights, but they can also seri- ously mislead us. The scientific method provides us

with a very important tool in helping us sift sense from nonsense.

John Ruscio’s *Clear Thinking with Psychology: Separating Sense from Nonsense* introduces critical thinking tools for use in evaluating pseudoscientific claims. Each of the book’s four major sections empha- sizes a unique aspect of clear thinking that affects

how well we evaluate claims. “Deception” introduces the ways by which others try to mislead us, “Self- Deception” describes the ways we unknowingly deceive ourselves, “Psychological Tricks” presents the mental shortcuts that often serve us well but require us to trade some accuracy for efficiency, and “Decision Making

and Ethics” reviews ways for improving the accuracy

of our everyday and professional judgments as well for making decisions that are consistent with sound ethical principles.

John Marton’s *Fables for Developing Skeptical and Critical Thinking in Psychology* uses the power of nar- rative to improve students’ critical thinking skills. The book consists of 10 interconnected “fables” in which

a young woman student and a semi-retired eccentric female professor together encounter a variety of psy- chological puzzles, including claims of psychic powers, unidentified flying objects, confabulated memories,

and difficult-to-explain gender miscommunications. The two characters join together in demonstrating critical thinking, as well as the more general attitudes that underlie application of the scientific method. The fables illustrate how illusory correlation, confirmation bias, hindsight bias, mental sets, and selective atten- tion underlie common misconceptions. The topics of the fables relate well to the contents of the Myers’ texts. For example, the first five fables deal with criti- cal thinking, sensation and perception, consciousness, learning, and memory. Written as an activity or discus- sion supplement to the standard introductory text, the book truly fosters active learning.

Randolph A. Smith’s *Challenging Your Precon- ceptions: Thinking Critically About Psychology* was designed to supplement an introductory psychology text and will help your students apply their critical thinking skills to the major content areas of psychol- ogy. It contains separate chapters on issues in statistics and research, the biological basis of behavior, sensa- tion and perception, states of consciousness, learning, memory, testing, motivation, psychological disorders,

therapy, and social psychology, for example. In Chapter

1, Smith provides the following guidelines for critical thinking that will in some cases extend the text definition.

1. Critical thinkers are open-minded. They can live with uncertainty and ambiguity. They enjoy mys- teries, avoid easy compartmentalizations of the world, and resist black-white analyses of complex issues.

2. Critical thinkers are able to identify inherent biases and assumptions. They know that people’s beliefs and experiences shape the way they view and inter- pret their worlds.

3. Critical thinkers practice an attitude of skepti-

cism. They have trained themselves to question the statements and claims of even those people they respect. They are ready to reexamine their own ideas.

4. Critical thinkers distinguish facts from opinions.

They recognize the need to rely on scientific evi- dence rather than personal experience.

5. Critical thinkers don’t oversimplify. They realize the world is complex and there may be multiple causes for behavior.

6. Critical thinkers use the processes of logical infer- ence. They carefully examine the information given and recognize inconsistencies in statements and conclusions.

7. Critical thinkers review all the available evidence before reaching a conclusion. They will consult diverse sources of information and consider a vari- ety of positions before making a judgment.

Julian Meltzoff’s *Critical Thinking About Research: Psychology and Related Fields* is organized into two parts. The first gives students an excellent introduc-

tion to the scientific method. Each step of experimental design, from the formulation of the hypothesis through data analysis and interpretation, is carefully and clearly explained. Research ethics are also discussed. The sec- ond part presents a series of fictitious journal articles that challenge students to apply their knowledge. Each article contains built-in flaws and includes commentary that identifies the errors that may have slipped by the reader. The book truly assists students in becoming informed and critical consumers of research.

James Bell’s *Evaluating Psychological Informa- tion: Sharpening Your Critical Thinking Skills* teaches students to evaluate psychological information from various secondary sources and to sift reliable evidence from propaganda. After explaining what is involved in critical thinking, Bell presents a four-step procedure for evaluating psychological claims. Designed as a supple- ment for general psychology, each chapter opens with critical thinking questions that guide and focus learning. This volume has an accompanying instructor’s manual that reviews the literature on critical thinking, includes answers for exercises, and contains exercises for addi- tional practice.

Donald H. McBurney’s *How to Think Like a Psychologist: Critical Thinking in Psychology* is a very useful supplement to any Myers text. It encourages critical thinking by holding widely held beliefs up to scientific scrutiny. Using a question-and-answer format, it deals with many of the common questions students bring to introductory psychology. For example: How

do you explain déjà vu? Isn’t psychology mostly com- mon sense? Can you prove there is no ESP? Can we

hear satanic messages in music that is played backward? Topics are organized according to the outline of the standard introductory psychology text.

D. Alan Bensley’s *Critical Thinking in Psychology: A Unified Skills Approach* illustrates the need for critical thinking in addressing questions such as the following: “Are people basically selfish?” “Can psychotherapists help people recover memories of sexual abuse that they have not recalled for decades?” “Can the moon cause people to commit crimes?” After addressing the nature and importance of critical thinking, Bensley argues

that the process of drawing sound conclusions involves a variety of skills, including analytical and deductive reasoning, as well as the careful formulation and testing of hypotheses. Specific chapters in Bensley’s book fit the organization of a standard introductory psychology text. Questions of ethics penetrate the book, including how we test people, the problem of stereotyping, and

the potential of harm to victims and those accused of sexual abuse in the repressed memory controversy. Each chapter opens with learning objectives, an outline, and “What do you think?” questions.

David A. Levy’s *Tools of Critical Thinking: Metathoughts for Psychology* is designed to promote students’ metathinking, that is, their thinking about thinking. Its brief chapters are devoted to many of the specific thinking errors discussed in the text, including the hindsight bias. The book contains many engaging exercises that challenge readers to improve their own strategies for inquiry and problem solving.

Robyn M. Dawes’ *Everyday Irrationality* highlights the limits of human intuition. Subtitled *How pseudo- scientists, lunatics, and the rest of us systematically*

*fail to think rationally,* the book defines irrationality as “adhering to beliefs that are inherently self- contradictory, not just incorrect, self-defeating, or the basis of poor decisions.” Dawes considers both the basis for irrational conclusions and the consequences of such conclusions. After considering the fundamental prin- ciples of probabilistic judgments, he focuses on specific types of irrationality—the subset fallacy, irrefutability, and the availability biases. He explains how we often substitute a good story or pure associations for a com- parative (“outside”) analysis. Both produce an illusion

of understanding. Although much everyday judgment, unsupported professional claims, and even social policy are based on irrational thinking, Dawes argues that we are not slaves to our desires and attitudes. Indeed, “we have the competence to be knowledgeable and rational, especially when we interact freely with each other.”

Scott Lilienfeld and his colleagues (2001) provide a large collection of useful resources for teaching courses in the science and pseudoscience of psychology. In an effort to promote critical thinking, they provide a model syllabus, primary and secondary texts, useful educa- tional videos, and websites that offer critical evaluations of pseudoscientific claims.

Ariely, D. (2008). *Predictably irrational: The hid- den forces that shape our decisions.* New York: HarperCollins.

Bell, J. (2005). *Evaluating psychological information: Sharpening your critical thinking skills* (4th ed.). Boston: Allyn & Bacon.

Bensley, D. A. (1998). *Critical thinking in psychology: A*

*unified skills approach.* Belmont, CA: Wadsworth.

Dawes, R. M. (2003). *Everyday irrationality: How pseu- doscientists, lunatics, and the rest of us systematically fail to think rationally*. Boulder, CO: Westview Press.

Forshaw, M. (2012). *Critical thinking for psychology: A*

*student guide.* Hoboken: Wiley-Blackwell.

Levy, D. A. (2003). *Tools of critical thinking: Meta- thoughts for psychology*. Long Grove, IL: Waveland.

Lilienfeld, S. O., Lohr, J. M., & Morier, D. (2001). The teaching of courses in the science and pseudoscience of psychology: Useful resources. *Teaching of Psychology,*

*28,* 182–191.

Marton, J. (2006) *Fables for developing skeptical and critical thinking in psychology.* Victoria, BC: Trafford.

McBurney, D. H. (2002). *How to think like a psycholo- gist: Critical thinking in psychology* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.

Meltzoff, J. (1998). *Critical thinking about research: Psychology and related fields*. Washington, DC: American Psychological Association.

Myers, D. G. (2002). *Intuition: Its powers and perils*. New Haven, CT: Yale University Press.

Ruscio, J. (2006). *Clear thinking in psychology: Sepa- rating sense from nonsense* (2nd ed.). Pacific Grove, CA: Wadsworth.

Smith, R. A. (2002). *Challenging your preconceptions: Thinking critically about psychology* (2nd ed.). Belmont, CA: Wadsworth.

Sternberg, R. J., Roediger, H. L., & Halpern, D. F. (20076). *Critical thinking in psychology.* Cambridge, England: Cambridge University Press.

Tavris, C. (2011). *Psychobabble and biobunk: Using psychological science to think critically about popular psychology.* Upper Saddle River, NJ: Prentice Hall.

The History of Psychology

## Psychology’s Early Roots

### Lecture/Discussion Topic: Psychology’s First

### Experiments

Morton Hunt’s *The Story of Psychology* is a wonderful resource for teaching the history of psychology. This superbly written account includes separate chapters on Wilhelm Wundt, William James, and Sigmund Freud, as well as chapters on major schools such as behavior- ism and Gestalt psychology.

Hunt opens his book with an account of history’s first recorded psychological experiment. In the seventh century b.c., Psamtick I, King of Egypt, wanted to prove the long-held belief that the Egyptians were the most ancient race on earth. He posed the hypothesis that if children had no opportunity to learn a language from the people around them, they would spontane-

ously speak the primal, inborn language of humankind, that is, the natural language of its most ancient people, which Psamtick presumed to be Egyptian. To test his hypothesis, Psamtick kidnapped two infants of a lower- class mother and ordered a herdsman in a remote area

to raise them. The children were to be properly fed and cared for but were never to hear anyone speak a word. The experiment worked, although not with the result expected by Psamtick. One day, when the chil- dren were just 2 years old, they ran up to the herdsman as he returned to his cottage from work and cried out “*Becos!*” Although he did not understand them, when they continued to repeat the word, he reported back

to the king. The children were brought to the royal court. When the king also heard them say “*Becos,*” he inquired and learned that *becos* was the Phrygian word for bread. To his great disappointment, the king con- cluded that the Phrygians were an older race than the Egyptians.

Hunt also records the birth of contemporary psy- chology on a December day in 1879. Wilhelm Wundt, a middle-aged professor at the University of Leipzig,

and two young students, Max Friedrich, a German, and G. Stanley Hall, an American, set up the apparatus for an experiment on the third floor of a shabby building called *Konvikt* (“hostel” or “retreat”). On a table they placed a chronoscope (a brass clocklike mechanism with a hanging weight and two dials), a “sounder” (a metal stand with a raised arm from which a ball would fall onto a platform), and a telegrapher’s key, bat-

tery, and rheostat. The various pieces were all wired together with a circuitry as simple as the most basic electric train. The three men intended to collect data for Friedrich’s Ph.D. dissertation on “the duration of apper- ception”—the time lag between the participant’s recog- nition that he has heard the ball hit the platform and his pressing of the telegraph key. Hunt writes, “It is not on record who made the ball drop that day and who sat

at the key, but with the first clack of the ball on the platform, the click of the key, and the registration of elapsed time on the chronoscope, the modern era of psychology had begun.”

Hunt, M. (2007). *The story of psychology* (Updated and

Revised Ed.). New York: Doubleday.

### Lecture/Discussion Topic: History of Psychology

The text account of psychology’s history can be readily expanded in class. A convenient way to organize the presentation is in terms of the discipline’s early theo- retical schools, in which psychologists typically shared a common theoretical and methodological orientation and worked on similar problems. Three early schools are worth discussion because their contributions to psy- chology are covered later in the text: Gestalt psychol-

ogy, psychoanalysis, and behaviorism. See also the next Lecture/Discussion Topic for a description of William James and functionalism.

*Gestalt Psychology.* In Germany, Max Wertheimer, with assistance from Kurt Koffka and Wolfgang Köhler, founded Gestalt psychology in revolt against Wundt. Interestingly, it was Wertheimer’s simple and ingenious explanation of apparent movement, a phenomenon the structuralists could not explain, that led to the develop- ment of this new psychological school. Wertheimer argued that apparent movement existed as a real phe- nomenon, irreducible to simpler sensations. Gestalt psy- chologists defined psychology as the study of the imme- diate experience of the whole organism. Reacting to the structuralists’ analytical approach, they argued that the whole is different from the sum of its parts. Psychology should attend to the molar aspects of behavior and experience. Perception—in particular, the principles

by which it is organized—received the most attention from this group. These grouping rules are discussed with material on perceptual organization. Gestaltists also initiated the study of insight and problem solving in animals and humans, issues that had previously been ignored. Many trace contemporary interest in cognitive psychology and phenomenology to the Gestalt move-

ment. The discussion of thinking introduces some of this research.

*Psychoanalysis.* Unlike the other schools, psy- choanalysis developed outside a university setting. It showed little interest in most of the traditional sub- ject areas of psychology. Led by Sigmund Freud, an

Austrian physician, it focused on the etiology, develop- ment, and treatment of abnormal behavior. From work- ing with troubled patients in his clinic, Freud concluded that unconscious mental forces direct our everyday behavior. Psychological maladjustment results from unresolved conflicts of which a person is unaware. Free association and dream analysis were among the impor- tant techniques Freud used in exploring the unconscious. He maintained that awareness of the unconscious forces should enable patients to lead more rational and satisfy- ing lives. Freud’s theory of personality in depth, and

his approach to therapy are discussed in depth later in the text. Freud made just one trip to the United States. In 1909, he accepted G. Stanley Hall’s invitation to speak at the twentieth anniversary celebration of Clark University.

*Behaviorism.* In the United States, John Watson led the revolt against introspection that produced the most influential school of psychology. Trained as a function- alist, Watson shifted attention from the functioning of the mind to behavior. He argued that psychology should study only what can be observed and measured objec- tively. Psychology was redefined as the scientific study of observable behavior. The study of consciousness

through the method of introspection (looking inward) was relegated to the trash heap. Watson’s ideas were so influential that two years after starting the revolt he was elected president of the American Psychological

Association. Behaviorists focused on how behaviors are learned and modified, and thus most of their influence has come through their theories of learning.

Clearly, B. F. Skinner was modern behavior-

ism’s most important and controversial figure. Operant conditioning was the focus of much of his work and

is discussed as part of the text coverage of learning. Skinner insisted that external influences shaped behav- ior. He died in 1990, still resisting the growing belief that cognitive processes have a place in the science of psychology. An increasing number of psychologists in the 1960s began to recognize that strict behaviorism had its limitations, and the cognitive revolution helped the discipline to recapture its initial interest in mental pro- cesses. Today, we define *psychology* as the science of behavior and mental processes.

### Lecture/Discussion Topic: William James—Founding

### Father of American Psychology

William James is one of the most important and intrigu- ing figures in the history of American psychology. On the seventy-fifth anniversary of the American Psycho- logical Association, opening speaker David Krech described James as “our father who begat us.” Morton Hunt’s chapter in *The Story of Psychology* provides a rich resource for a discussion of James.

James, the first psychology professor at an American university (Harvard), began teaching the subject in 1875. Within two decades, psychology was taught at two dozen universities, three psychology jour- nals were being published, and a professional psychol- ogy society had been founded.

James introduced experimental psychology to the United States. In fact, he and his students started per- forming laboratory experiments about the same time

as Wundt and his students. Although James recognized the value of experimentation, he found it boring and spent no more than two days a week in the laboratory. Sometimes, he even disavowed the label of psycholo- gist. He told a friend, “I naturally hate experimental work.” Referring to Wundt’s laboratory work, he lamented, “The thought of psychophysical experimenta- tion and altogether of brass-instrument and algebraic psychology fills me with horror.” Nonetheless, he accepted its value, and his students conducted a wide variety of experiments. Moreover, he forced himself

to do it when he was convinced it was the best way to prove or disprove a theory. For example, he used him- self as a research participant in testing the ancient belief that memory, like a muscle, can be strengthened through exercise. In a series of memory exercises, he found that

exercise actually diminished, at least temporarily, the strength of his memory.

Hunt notes that it took James 12 years to complete the first textbook in psychology. The mammoth work

of nearly 1400 pages in 2 volumes could hardly be used in the classroom. James quickly turned out an abridged version. The full-length version was known as “James,” and the abridgement was referred to as “Jimmy.” In

1894, James was the first American to call attention

to Sigmund Freud, and in 1909 he met Freud at Clark University during the psychoanalyst’s only visit to the United States. In contrast to Freud, James avoided creat- ing a theoretical system, founded no school, trained

few graduate students, and had no school of followers. Although he said something about every topic in psychology, the following six ideas constituted his chief influence.

1. *Functionalism:* For James, the proper study of psychology was the introspective analysis of the “states of mind” that we are conscious of in every- day life and of the functions they perform for us. He thought that the mind’s processes had evolved because of their life-preserving functions. Thus, to understand these complex processes, we need to know what functions they perform. Hunt suggests that we should not view functionalism as a system. Indeed, James deliberately avoided presenting his

ideas as a coherent whole because he thought it was far too early in the history of the discipline for any grand theory.

2. *The nature of mind:* James examined every solution to the mind-body problem and found none to be sat- isfactory. He thought psychologists should lay aside the whole mind-body problem because the disci- pline was not ready or able to articulate the connec- tion between physiological states and mental states. Rather, for the present, its proper concern should be the description and explanation of such processes

as reasoning, attention, will, imagination, memory, and feelings. James’ suggestion would become the dominant view within many branches of psychol- ogy.

3. *The stream of thought:* Using introspection (looking inward) as the major approach to the mind, James argued that his results pointed to an unbroken flow of complex conscious thought. Each person’s con- sciousness is a continuum, not a series of linked experiences or thoughts. Although the objects of

our thoughts or perceptions may seem distinct and separate, our awareness of them forms a “river” or “stream,” the best metaphor for our consciousness.

4. *The self:* James suggested that “the belief in a dis- tinct principle of selfhood” was an essential part

of the “common sense of mankind.” Thoughts are not merely thoughts; they are *my* or *your* thoughts.

The perception of personal identity arises from the continuity of the stream of consciousness. From moment to moment and from day to day, I know that I am the same as I was a moment ago, a day ago, a decade ago. These feelings and the acts associated with them can be studied, and thus they constitute the “empirical self.”

5. *Will:* Some observers suggest that James’ most valuable contribution to psychology was his theory of will—the conscious process that directs voluntary movements. Our vast supply of infor- mation and experience in achieving desired ends is what leads us to will an act in the first place. Sometimes, we act unhesitatingly. At other times,

choosing which idea to ignore and which to attend to becomes the act of willing. The choice can be instantaneous or the result of long deliberation and reasoning. To believe in complete determination, thought James, would make us passive and power- less. The belief in free will allows us to consider alternatives, to plan, and, finally, to act on our plans.

6. *The unconscious:* Although James was primarily concerned with conscious mental life, he carefully distinguished between those acts that we perform by consciously commanding muscular movements and other acts that have been practiced and thus have become automatic. We walk, climb steps,

and dress without thinking of the necessary move- ments. James wrote that “It is a general principle in psychology that consciousness deserts all processes where it can no longer be of use. We do better without thinking of the movements required.” In this way, James anticipated contemporary research in which complex voluntary movements, such as piano playing and driving, become “overlearned” and are largely performed unconsciously. In con- trast to Freud, James did not see the unconscious as the mind’s way of banishing unacceptable sexual drives from awareness.

7. *Emotion:* James’ theory of emotion was revolution- ary and the James-Lange theory, discussed under Theories of Emotion, is still highly regarded in psychology. This “minor” theory led to far more research than any of James’ other ideas. James argued that the emotion we feel is not what causes bodily symptoms such as a racing heart or sweaty palms. Instead, the nervous system, reacting to an external stimulus, produces those physical symp- toms and our perception of them is what constitutes emotion.

With these ideas, James transformed an abstract science into a discipline that spoke directly to personal interests and concerns. James also influenced psychol- ogy in two other practical ways. His suggested applica-

tions of psychological principles to teaching became the core of educational psychology. In addition, James suc- ceeded in convincing the Rockefeller Foundation and other groups to allocate millions of dollars to the mental hygiene movement, the establishment of mental hospi- tals, and the training of mental health professionals.

Hunt, M. (2007). *The story of psychology* (Updated and

Revised Ed.)*.* New York: Doubleday.

### Student Project: Today in the History of Psychology

Students, like most of us, like to know about important events that occurred on their birthday; it personalizes those events. Ask students to visit the “Today in the History of Psychology” web page (cwu.edu/~warren/ today.html). At the web page, they should enter the month and date of their birthday, then choose one of the events to investigate more thoroughly. Why was this an important event? What impact did it have on the field

or discipline of psychology? Students can present what they learn in class, as a written paper, or as an entry in the class discussion board.

### Classroom Exercise: Eminent Psychologists

Marty Dennis of Augustana College passes along a sim- ple exercise for introducing psychology and its history.

It can help correct students’ common misconceptions about the discipline.

Ask students to write the name of “an eminent psychologist from the past” and “a living eminent psy- chologist and the work for which he or she is known” on half a sheet of paper or an index card. Collect the

responses and read them in class. By the time you get to the tenth or fifteenth “Freud,” the class will be chuck- ling. Most students will leave the second name blank.

Warn students that Freud may receive less cover- age in the text and course than they might anticipate because psychologists certainly do not consider Freud to be the “father” of the discipline. In fact, most have real concerns about the scientific validity of his theory and method. Most important, the study of psychopa- thology, personality, and psychotherapy, for which

Freud is best known, represents only a small part of the discipline. Dennis reports that the exercise helps many students to realize that their view of the discipline is too narrow. The exercise also sets the tone for a course ori- ented toward psychological science.

Dennis, M. (2005, January 20). Common myths about psychology. Message posted to PSYCHTEACHER

@list.kennesaw.edu. NO

## Psychological Science Develops

### PsychSim 6: Psychology’s Timeline

This activity provides a comprehensive synopsis of the origins of psychology, the early history of psychology

as a discipline, and the major themes in twentieth- century psychology. On a tour of the history of psy- chology, the student is introduced to some of the pio- neers of psychology as a scientific discipline.

### Student Project: Notable Figures in Psychology

To deepen student understanding of some of the notable figures in psychology, have them research the life of

one of the individuals on The Society for the History of Psychology’s website (historyofpsych.org/teacher- studentresources/individuals.html). First, identify for students the individuals on this list who are covered in the text (you may use the list under The Twentieth Century’s Most Eminent Psychologists as a starting

point since all our discussed in the text). Assign those key individuals to students, individually, in pairs of students, or in small groups, depending on the size of your class. When you get to the chapter in the text section that addresses the contributions of a particular individual, give the students who were assigned that person a few minutes to summarize for the class what they learned.

### Student Project/Classroom Exercise: If a Notable

### Psychology Figure Tweeted

To help students think about the perspectives of key historical figures, ask them to create a tweet that cap- tures an assigned person’s essential views. With a

140-character limit, can students capture their essence? This can be done in class in small groups or as a take- home assignment for a class discussion board or even for posting on Twitter with a class hashtag. You may also choose to do this at the end of each class. In the memory chapter, for example, what would have HM

have tweeted? (Thank you to Michael Britt for inspiring this activity.)

History in the Classroom. (n.d.). Teaching of Psych Idea

Exchange: An OTRP Resource. Retrieved December 30,

2013, from <http://topix.teachpsych.org/w/page/19981004/> History%20in%20the%20Classroom.

### Lecture/Discussion Topic: Freud Audio Recording

So much has been written about Freud, students may be interested to hear him speak. In 1938, the BBC made

the only known recording of Sigmund Freud’s voice. The 2-minute recording can be heard at youtube.com/ watch?v=5jJ6Lhk1pNg.

The recording is a bit difficult to understand, so here’s what he says:

—I started my professional activity as a neurologist try- ing to bring relief to my neurotic patients.

—Under the influence of an older friend and by my own efforts, I discovered some important and new facts about the unconscious in psychic life, the role of instinctual urges and so on.

—Out of these findings grew a new science, Psycho- Analysis, a part of psychology and a new method of treatment of the neuroses.

—I had to pay heavily for this bit of good luck. People did not believe in my facts and thought my theories unsavory.

—Resistance was strong and unrelenting. In the end I succeeded in acquiring pupils and building up an International Psycho-Analytic Association. But this struggle is not yet over. Sigmund Freud.

### Student Project/Lecture/Discussion Topic: The

### Twentieth Century’s Most Eminent Psychologists

Steven J. Haggbloom and his colleagues have attempted to identify the 100 most eminent psychologists of the twentieth century. Eminence was assessed by scores

on three quantitative variables and three qualitative variables. The quantitative variables were journal citation frequency, introductory psychology textbook citation frequency, and survey response frequency

(an e-mail survey of 1725 members of the American Psychological Society). The qualitative variables were National Academy of Sciences membership, election as American Psychological Association president or receipt of the APA Distinguished Scientific Contribu- tion Award, and surname used as an eponym (i.e., a psychological term such as Pavlovian conditioning or Skinner box) to represent a theory, procedure, test, or apparatus.

The first 25 are listed here.

Rank Name

1 B. F. Skinner

2 Jean Piaget

3 Sigmund Freud

4 Albert Bandura

5 Leon Festinger

6 Carl Rogers

7 Stanley Schachter

8 Neal Miller

9 Edward Thorndike

10 Abraham Maslow

11 Gordon Allport

12 Erik Erikson

13 Hans J. Eysenck

14 William James

15 David McClelland

16 Raymond Cattell

17 John B. Watson

18 Kurt Lewin

19 Donald O. Hebb

20 George A. Miller

21 Clark L. Hull

22 Jerome Kagan

23 Carl Jung

24 Ivan Pavlov

25 Walter Mischel

Haggbloom and colleagues suggest a number of interesting student projects that utilize the list. Either individually or in small groups, students could (1) iden- tify the most important contributions of one or more of the psychologists on the list, (2) develop an argument for why a specific psychologist who is not on the most eminent list should be (or vice versa), (3) debate the relative rankings of two psychologists, or (4) prepare a biography of one of the psychologists.

Haggbloom, S. J., Warnick, R., Warnick, J. E., Jones, V. K., Yarbrough, G. L., Russell, T., et al. (2002). The 100 most eminent psychologists of the 20th century. *Review of General Psychology, 6*, 139–152.

### Classroom Exercise: Psychology as Science (PAS) Scale

James Friedrich’s Psychology as Science (PAS) Scale (Handout 1) can be used either before or after students have read the text introduction to psychology. It is designed to measure the degree to which respondents view the discipline of psychology as a science. Total scores are obtained by first reversing the numbers cir- cled for items 8, 9, 10, 14, 17, 19, and 20 (1 = 7, 2 = 6,

3 = 5, 4 = 4, 5 = 3, 6 = 2, 7 = 1) and then adding them with the actual numbers circled for items 3, 4, 6, 7, 12,

13, 16, and 18 (items 1, 2, 5, 11, and 15 are fillers). Scores can range from 15 to 105, with higher scores reflecting a greater inclination to perceive psychology as a science. The scale may be useful in introducing

the definition of psychology as a science as well as the specific methodology of the discipline. You may also find it useful to know your students’ perspectives on this critical issue.

Using factor analysis, Friedrich has divided the scale into three subscales. If you choose to use only one rather than the entire scale, note that items 3, 4, 12, and

13 primarily address respondents’ willingness to place psychology in the same conceptual or functional frame- work as the hard sciences; items 10, 14, 17, 18, and 20 address beliefs regarding the need for psychological research and the value of methodological training; and items 6, 7, 8, 9, 16, and 19 tap views of determinism and belief in the predictability of behavior.

You may want to administer this scale at the begin- ning of the course and again at the end to see if stu- dents’ attitudes about psychology have changed.

Friedrich, J. (1996). Assessing students’ perceptions of psychology as a science: Validation of a self-report mea- sure. *Teaching of Psychology, 23,* 6–13.

Contemporary Psychology

## Issues

### Classroom Exercise: The Scientific Approach

The text notes that psychology helps us understand why people think, feel, and act as they do. As such, it is both

fascinating and useful. However, it is not equipped to answer questions of ultimate meaning.

David Anderson describes a classroom exer- cise that will effectively demonstrate that science is equipped to answer some questions but not others. Science is not the only way to approach life. To help students understand where science fits into the larger picture, place the following series of statements on the chalkboard before class begins.

1. God is dead.

2. The best things in life are free.

3. Shakespeare’s *Richard III* is a better play than

*Romeo and Juliet*.

4. Abortion is wrong.

5. There is a genetic predisposition to schizophrenia.

6. The mind is just like a computer.

7. Attitudes affect cancer.

8. Pornography is harmful.

9. 2 + 2 = 4.

Ask students how they would establish the validity of each statement. To get them thinking, ask them about the courses they have had that might have addressed these issues. Who on the faculty might be interested in these issues, or which department might discuss them? Clearly, there is more than one approach to “truth.”

Note that each perspective has its questions and limits. Conclude that the various disciplines and perspectives need not be viewed as competing but as complemen- tary.

Anderson, D. (1997, January). First day: Experimental psychology. *Teaching in the Psychological Sciences* (TIPS—Online Discussion Group).

### Classroom Exercise: Self-Assessment on Some of Psychology’s Big Issues

During its history, psychology has wrestled with fun- damental issues that will be discussed throughout the text. Human *rationality* and *irrationality* and *stability* and *change* are two of those fundamental issues. For example, are we deserving of the name *Homo sapi- ens*—wise humans? In some ways, we are smarter than the most powerful computers. In other ways, we are prone to systematic bias and error. In terms of *stability* and *change,* do our individual traits persist as we age? Do our personalities change in different situations?

Handout 2 can be used to introduce students to the issues of stability and change, human rationality and irrationality, and nature and nurture. In addition, the handout will help students to appreciate that psycho- logical research often attempts to answer questions we all ask about behavior and on which we have at least tentatively formulated a position.

In scoring, emphasize that the test is primarily intended to introduce and stimulate discussion of some of psychology’s important issues, not to provide an

accurate self-assessment. At best, the scores are sug- gestive of a person’s perspective on the issues. Items 1,

4, 7, 10, and 13 represent the “rationality-irrationality” scale; to calculate their total score, students should reverse the numbers before items 4 and 10 (0 = 5, 1

= 4, 2 = 3, 3 = 2, 4 = 1, and 5 = 0) and then add the numbers for all five items. Scores can range from 0 to 25, with higher scores suggesting a stronger belief in rationality. Items 2, 5, 8, 11, and 14 represent the

“stability and change” scale; reverse the number placed before 11, and then add the numbers for all five items. Scores can range from 0 to 25, with higher scores indi- cating a stronger belief in stability of behavior across time and situation. Items 3, 6, 9, 12, and 15 represent the “nature–nurture” issue; reverse the numbers placed before 6 and 15, and then add all the numbers on the scale. Scores can again range from 0 to 25, with higher scores reflecting a stronger belief in the role of nature.

Students are typically eager to know how they compare with their classmates on these issues. You can form small discussion groups or ask for volunteers to share their positions as well as their rationale with the full class. Collecting the data can provide some rough indication of your students’ initial leaning on issues that will reappear throughout the course.

Yet another alternative, suggested by James Waller, is to have students clarify their own philosophies of psychology by writing their personal position on one

or more of the polarities. Review briefly in class these major issues in psychology and then have students write in a couple of paragraphs their own opinion on the

issue. The exercise will help them organize and clarify their thoughts and, most important, actively engage them with psychology’s big issues from the beginning.

Waller, J. (1994). Philosophies of psychology: A discov- ery process for undergraduates. *Teaching of Psychology,*

*21,* 33–35.

### Classroom Exercise: Is Human Nature Fixed or

### Changeable?

Related to both the issues of nature and nurture and stability and change are questions regarding the fixed or changeable character of people. Handout 3 is one of the many scales Carol Dweck has used to distinguish between entity and incremental theorists. Entity theo- rists tend to think traits are fixed, whereas incremental theorists see traits as changeable. To score the scale,

students should first reverse the numbers they placed in front of items 3, 5, 7, and 8 (i.e., 1 = 6, 2 = 5, 3 = 4,

4 = 3, 5 = 2, 6 = 1). Then, they should add up the num- bers in front of all eight statements to obtain a total score. Scores can range from 8 to 48. Lower scores reflect the belief that traits are fixed (entity theorists); higher scores indicate a belief that traits are changeable (incremental theorists).

In contrast to incremental theorists, entity theorists are more likely to believe that a person’s underlying character can be revealed by a single behavior or per- formance. This difference is true for both positive and negative acts. In other words, entity theorists tend to believe that what they see on the outside reflects what people are like on the inside. This applies not only to other individuals and groups but also to themselves. For example, entity theorists experience setbacks in their academic performance as reflecting their lack of ability. They tend to become defensive and often feel helpless. In contrast, incremental theorists value learning and growth and respond to adversity with increased effort and strategies for change. They tend to be resilient.

Dweck and her colleagues have measured the brain waves of students with these contrasting mindsets. Students took a test composed of very difficult ques- tions. Precisely 1.5 seconds after the students answered a question, the computer indicated whether they responded correctly or incorrectly. And exactly

1.5 seconds after that, the computer gave the right answer. To determine when the students’ attention was most focused, the investigators measured their brains’ electrical activity. Students with an entity or fixed mindset stopped paying attention once they learned if they were right or wrong. Those with an incremental or growth mindset were more focused on learning the real answer.

Dweck and her colleagues have shown how it

is possible to change people’s mindsets. Junior high school students with low math scores were given eight sessions of training in study skills. Half the students also received instruction in the malleability of intel- ligence. They were told that the brain is a muscle that can be strengthened with hard work. Results indicated that in contrast to those not given this instruction, those who learned the malleable mindset rebounded with better grades. Their teachers also reported changes in their motivation. Dweck has now designed a computer software program of this strategy called “Brainology,” which was tested in 20 New York City schools and is now generally available through Mindset as an online interactive program (mindsetworks.com).

The contrasting mindsets also react differently in relationships. In her book *Mindset: The New Psych- ology of Success,* Dweck describes how those with fixed and growth mindsets are likely to respond differ- ently to rejection in a love relationship. Those with a fixed mindset feel judged and labeled by the rejection. They see themselves as branded as unlovable and are likely to lash out. The number one goal is revenge. Conversely, those with a growth mindset are more likely to respond to rejection with understanding and forgiveness and a desire to move on. Although deeply hurt by what happened, they want to learn from it. One person with such a growth mindset stated, “That rela-

tionship and how it ended really taught me the impor- tance of communicating. I used to think love conquers all, but I now know it needs a lot of help. I also learned something about who’s right for me. I guess every rela- tionship teaches you more about who’s right for you.” Because of their growth mindset, they did not feel per- manently branded. They tried to learn something about themselves and relationships that would be useful in having a better experience in the future.

In class, you can relate Dweck’s research to the nature–nurture issue and its practical implications. From what is presented above, you can also challenge students to demonstrate how her work reflects the bio-

psychosocial approach. Most notably, Dweck’s work on contrasting mindsets reflects the importance of the cog- nitive or psychological approach. But clearly, her inclu- sion of brain scans demonstrates the potential insights that come from a biological approach. Efforts to change mindsets highlight the importance of the social or envi- ronmental perspective.

Dweck, C. S. (2007, May). *Can personality be*

*changed?* Keynote address presented at the 19th Annual Convention of the Association for Psychological Science, Washington DC.

Dweck, C. S. (2006). *Mindset: The new psychology of success.* New York: Random House.

Dweck, C. S. (1999). *Self-theories: Their role in moti- vation, personality, and development.* Philadelphia: Psychology Press.

## Culture, Gender, and Other Influences on Behavior

### Lecture/Discussion Topic: Differences in Cultural

### Norms

Cultural diversity fascinates students, and you can approach a class discussion in a variety of ways. One approach is to pose an interesting and provocative question: How do we deal with cultural practices that violate our own cultural values? Respect for diversity, including norms practiced by cultures radically differ- ent from our own, sounds like a wonderful ideal, but how should we react when it clashes with some deeply held value, such as gender equality? Certainly, we will agree that we needn’t be accepting of brutality, such as the genital mutilation that is common in African coun- tries. But what about other gender roles and practices

in Muslim cultures such as Kuwait or Saudi Arabia? What about the requirement in the Sudan that a woman may not leave the country without the permission of

her husband, father, or brother? How about the law in Saudi Arabia that forbids women to drive? Although in October 2013, women demonstrated against this ban, as of December 2016 it is still in force. Prince Alwaleed came out in favor of allowing women to drive, but Mohammed bin Salman, the deputy crown prince, is not so sure it’s a good thing. On a positive note, women in

Saudi Arabia were given the right to vote and run for local office in November 2015. In short, what are the limits to tolerance?

Chan, S. (2016, November 30). Let women drive, a Saudi prince urges. New York: New York Times. Retrieved November 30, 2016 from nytimes.com/2016/11/30/world/ middleeast/saudi-arabia-women-driving.html?\_r=0.

Triandis, H. C. (1994). *Social behavior and culture.* New

York: McGraw-Hill.

### Classroom Exercise: Gender Roles

Sally Raskoff (2013) describes a classroom activity

she adapted from one created by Jeannie Ludlow. This activity also works well in an online class where stu- dents are divided into separate discussion spaces.

Before class, write down several gender-related concepts on individual pieces of paper. Raskoff uses masculine, father, intelligence, violent, wealth, athlete, president, CEO, feminine, mother, poverty, teacher,

sex worker, and child care worker. Divide students

into small groups. Give each group one of the concepts without telling them what the other concepts are. The task of each group is to come up with a list of words that correspond to the concept they have been given. After the groups have generated their lists, have each group send a representative to the board to write down their list of words. Through class discussion, determine which lists group together. When the lists have been grouped, have the groups’ representatives come to the board to write down next to their list of words the con- cept they had been given.

This activity provides a nice opening to discuss tra- ditional gender roles and how those roles affect us and the people with whom we interact.

Raskoff, S. (2013, March 6). Everyday Sociology Blog. Who Makes America? Retrieved from [http://everydayso-](http://everydayso-/) ciologyblog.com/2013/03/who-makes-america.html.

### Lecture/Discussion Topic: Systemizing and Empathizing

### Brains

Simon Baron-Cohen (2003) argues that women are more likely to have an empathizing brain (focus on others’ emotions) and men are more likely to have a systemizing brain (figuring out how things work). He is careful to point out that both biology and culture con- tribute to the development of such brains.

Of course, not all women are empathizing and not all men are systemizing and some people are equal parts both. Baron-Cohen does argue that it explains why, for example, girls are more likely to watch for a bit before joining a group, whereas boys are more likely to leap

in and attempt a take-over. It also shows why males are more likely to show direct aggression and females are more likely to show indirect aggression, why female infants make more eye contact and male infants look longer at hanging mobiles. In jobs that are largely about

systems—say, engineering—we see more males. In jobs that are largely about people, we see more females. Ask students to generate additional examples.

While Baron-Cohen acknowledges that “culture and socialization play a role in determining a male brain or female brain, he argues that “these studies strongly suggest that biology also partly determines this.” For more on this and ASD, see the unit on Developing Through the Life Span.

Your students can take the “interactive empa- thy quotient test” and the “interactive system- izing quotient test” at theguardian.com/life/news/ page/0,12983,937443,00.html.

Baron-Cohen, S. (2003, April 17). They just can’t help it. *The Guardian.* Retrieved from theguardian.com/educa- tion/2003/apr/17/research.highereducation.

## Perspectives

### Lecture/Discussion Topic: Illustrating Psychology’s Complementary Perspectives:

The Case of Andrea Yates

Presenting the case of Andrea Yates will not only stimulate students’ interest but will also help you to introduce psychology’s complementary perspectives. Perhaps most important, it will help you demonstrate the complexity and multiple causes of behavior.

On June 20, 2001, after her husband had left for work, Andrea Yates, a Houston mother, drowned her five children in the family bathtub. She told police that she drowned the children to save them from burning

in hell. A jury rejected her insanity defense, and she was sentenced to serve life at a psychiatric prison. In January 2005, a Texas Appeals Court overturned her conviction because a psychiatrist for the prosecution had falsely testified that he had consulted for a *Law and Order* episode, which the Texas court stated may

have contributed to the jury’s rejection of Yates’ insan- ity defense. Retried in 2006, Yates again entered a plea of not guilty by reason of insanity, and the second jury acquitted her. Yates was sent to a hospital, not prison. She was committed by the court to a high-security mental health facility where she received medical treat- ment. In 2007, Yates was moved to a low-security

state mental hospital, where she remains. Under Texas law, she is under the jurisdiction of U.S. District Judge Belinda Hill, who oversaw both trials, for the rest of her life. Yates could be released only if Hill finds that she

is mentally competent and no longer a danger to herself or others. In March 2012, she asked the court for a pass to leave the hospital for two hours a week to attend church. In May, the court denied her request.

Ask your class, “What do you believe to be the causes of Andrea Yates’ murder of her children?” You are sure to have a lively discussion in which students will provide diverse answers.

Do we find the cause in her private mental func- tioning (cognitive perspective)? Clearly, Andrea expe- rienced low self-esteem. At the time she killed her chil- dren, she believed she was possessed and that the sign of Satan (666) was marked on her scalp. She told the police that her children “weren’t developing correctly”

and that drowning them was the only way to save them.

Do we find the cause in her mental disorder or ill- ness that may have a biological basis (neuroscience and behavior genetics perspectives)? Depressive disorders run in families and Andrea’s was no exception. A sis- ter and two brothers were also taking antidepressants. Research indicates that brain chemistry plays a role in psychological disorder. The neurotransmitter serotonin appears scarce in major depressive disorder. Diagnosed

as suffering from postpartum depression with psychosis, she had been taken off her antipsychotic medication about a month before the children’s deaths. Andrea’s husband, Russell, claimed he had been pleading with doctors to again prescribe Haldol, used in treating peo- ple who hear voices or have delusional thoughts.

Do we find the cause in her social environment (behavioral and social-cultural perspectives)? Why did her doctor take her off her antipsychotic medica- tion? More important, was this really a family affair? Andrea’s in-laws report that her husband was not

socially supportive. He claimed he had never changed a diaper. How could he leave her alone with the five chil- dren when she could barely care for herself? Why, after doctors had strongly recommended no more children, did he impregnate her a fifth time? And where was her extended family when she needed help so desperately? Martin Seligman has effectively argued that the indi- vidualism of American society (and most other Western societies) plays a critical role in its accelerating rate of depression.

Finally, ask students what important principle this case might reveal. The class is likely to conclude that there are many factors that shape human behavior.

Chan, M. (2016, June 20). Revisiting Andrea Yates 15 years after she drowned her children. *Time*. Retrieved November 30, 2016 from time.com/4375398/andrea- yates-15-years-drown-children.

### Lecture/Discussion Topic: The Biopsychosocial

### Approach and Obesity

Research on obesity effectively illustrates both the importance and complementary nature of psychology’s levels of analysis. In class, you might explain how bio- logical, psychological, and social-cultural factors all contribute to understanding what has rapidly become the United States’ number one health threat. The most recent statistics show that 37.9 percent of adults older than 20 are obese and 7.7 percent are extremely obese; this is more than the number who are overweight (32.7 percent). Among children and adolescents, 18.6 per-

cent of boys and 15 percent of girls are obese (Ogden, Carroll, & Elegal, 2012). Economist Barry Popkin states, “In a very short time many low- and middle- income countries have attained rates of overweight and obesity greater than or equal to those of the USA and Europe.”

The *biology* of obesity questions the notion that being overweight is only a matter of a weak will. Evolutionary psychologists observe that getting fat is an evolutionary advantage. Early humans who could best store energy when food was abundant for use in lean times survived to pass down their genes. Psychologist Paul Rozin notes that “we’re hardwired to spend as little energy as possible . . . a general rule that animals fol- low is to do as little as you can to do what you have to do. They try to get more calories but use up the fewest calories getting them.” Studies of adoptees and twins indicate a genetic influence on body weight. Identical twins have very similar weights even when reared apart. Genetics influences the number and size of fat cells that determine our body weight. Obese people’s “weight thermostats” are set higher; when their weight drops below the set point, their hunger increases and metabo- lism decreases.

A variety of *psychological* factors also contribute

to obesity. Our eyes rule our bellies, suggests Barbara J. Rolls of Pennsylvania State University, partly because we were told to “clean our plate” when young. Three- year-olds, she reported, tend to stop eating when they

are full. However, when she served adults macaroni and cheese on four different days, the larger the portions,

the more they ate, despite the fact that they all reported similar levels of satiety. Similarly, she reported, adults ate twice as many M&M’s from a jumbo package than from a small one, as well as more potato chips from a bigger bag than from a smaller one. It is also clear that when people are given more variety, they eat more.

Our feelings, too, lead to overeating. For those who are consciously restraining their eating, feeling anxious or depressed can unleash the urge to eat. And once a diet is broken, the person often concludes, “what the heck” and binges.

Finally, *social-cultural* factors contribute to over- eating. Paul Rozin notes that America is a culture of bigness: “When someone comes to your house, the worst thing you can do is not give them enough food. The French would be more concerned about giving

them food of high quality.” **(**Compared with the French, Americans eat more but enjoy it less, usually hurrying through meals. Even in fast-food outlets, the French eat more slowly.) Kelly D. Brownell of Yale University labels our current social setting a “toxic environment”

of food: “Unhealthy food is highly accessible, it’s con- venient, it’s engineered to taste good, it’s heavily pro- moted, and it’s inexpensive. If you wanted to engineer a good food environment, you’d have the reverse of all

that.” Brownell notes that both the politics and econom- ics of agriculture encourage overproduction of food, which then has to be marketed. “You sell the food by sweetening it, by offering it in larger portions, and by promoting it very heavily.”

Clearly, biological, psychological, and social- cultural influences are all important to understanding this major health threat. They supplement one another, with each shedding important light on obesity. The dif- ferent levels of analysis are not competing but comple- mentary, because “everything is related to everything else.”

Hebert, R. (2005, January). The weight is over. *APS Observer,* 20–24.

Fryar, C. D., Carroll, M. D., & Ogden, C. L. Prevalence

of overweight, obesity, and extreme obesity among adults aged 20 and over: United States, 1960–1962 through

2013–2014. Centers for Disease Control and Prevention. Retrieved November 30, 2016, fromcdc.gov/nchs/data/ hestat/obesity\_adult\_13\_14/obesity\_adult\_13\_14.htm.

Ogden, C. L., Carroll, M. D. Kit, B. K., & Flegal, K.

M. (2012, January). Prevalence of obesity in the United

States, 2009–2010, NCHS Data Brief, No. 82.

### Classroom Exercise: Metaphors and Psychology’s

### Perspectives

As explained in the text discussion on study techniques, active processing of material is key to “an enriched life and an enlarged vision.” Helping students to understand the differences among psychology’s perspectives is best achieved through active processing. One way to have students actively work through the differences among

the various theoretical perspectives that shape psycholo- gists’ work is to have them construct metaphors for each perspective. There are a number of different ways to do this. Students can draw pictures representing the meta- phors, or write verbal descriptions. They can work indi- vidually or in small groups, whichever is most appropri- ate for your class. To ensure that you get good repre- sentation of all the theoretical perspectives you choose

to cover, it might be best to assign specific theoretical perspectives to different students or groups. Students should be able to explain which parts or structures of the metaphor represent which aspects of the theoretical per- spective. Some examples of perspectives and metaphors are as follows:

*Psychodynamic perspective:* Metaphors include an iceberg, with its different levels of consciousness; a set of forces engaged in a battle or war; or any num- ber of other metaphors in which students represent a dynamic conflict among forces (e.g., conscious and unconscious; id, ego, and superego) that results in the theorized defense mechanisms.

*Behaviorist perspective:* The classic metaphor is to represent the human mind as a “black box.”

The opaque color “black” is meant to represent the notion that we cannot peer directly inside the mind to see objects of thought or mental activity (e.g., we cannot look inside a brain and literally “see”

a memory with all its vivid details, or a piece of information and its exact form and content). We know that the mind “does” certain things, but its activities and contents cannot be directly observed. Thus, mental activities per se are not open to empir- ical investigation in the behaviorist perspective. However, what can be observed are the “inputs”

to the box (the experiences, stimuli, and so on),

as well as its “outputs” (resulting behaviors, overt reactions, words, and so on). Objective empiri-

cal observations of the inputs and outputs allow

us to draw conclusions about how they are related without having to characterize what is “stored” or “worked on” inside the box itself. There are other metaphors, too, that students can use so long as they involve identify using opaque objects or locations.

*Cognitive perspective:* Metaphors related to com- puters are relatively easy to explain (e.g., hardware versus software). Other types of machinery are also appropriate to capture the concepts of information processing (e.g., selection, input, storage, manipula- tion, use of information).

*Evolutionary perspective:* Competing behavior pat- terns can be represented as competitors in a race for survival, metaphors that make use of the concept of successful adaptation.

Students can generate the metaphors during class time, or, for more sophisticated analysis, have them complete this exercise as homework. This kind of activ- ity is useful at the beginning of a semester, but it would also make an excellent “capstone” activity at the end of the semester.

Leavya, A. M., McSorleya, F. A., & Botéb, L. A. (2007) An examination of what metaphor construction reveals about the evolution of preservice teachers’ beliefs about teaching and learning. *Teaching and Teacher Education,*

*23*(7), 1217-–1233. doi:10.1016/j.tate.2006.07.016.

### Classroom Exercise/Student Project: Applying

### Psychology’s Specific Theoretical Perspectives

To foster students’ understanding of psychology’s current perspectives, provide them some practice in applying the perspectives to a behavior other than anger. In small groups of, say, four or five students each, have them identify a behavior pattern they find interesting. Randy Larsen and David Buss suggest using personality characteristics such as procrastination, narcissism, and perfectionism, although any behavior pattern that catch- es the group’s interest will work. Have them prepare seven sentences about the characteristic, one to represent

each of psychology’s current perspectives: neurosci- ence, evolutionary, behavior genetics, psychodynamic, behavioral, cognitive, and social-cultural. Each sentence should make a statement or raise a question about the behavior pattern from a given perspective. Give the groups 15 or 20 minutes for the task, then have them describe their chosen behavior pattern and list their statements for the full class.

Alternatively, or in addition, distribute Handout

4 to each student or to each small group. It provides seven sentences regarding prosocial or helping behav- ior. Each statement represents one of psychology’s cur- rent perspectives. Give students 5 or 10 minutes to link each statement to its appropriate perspective. The cor- rect answers follow: 1. Evolutionary 2. Behavior genet- ics 3. Neuroscience 4. Psychodynamic 5. Cognitive 6. Social-cultural 7. Behavioral.

Larsen, R. J., & Buss, D. M. (2008). *Personality psy- chology: Domains of knowledge about human nature* (3rd ed.). Boston: McGraw-Hill.

### Lecture/Discussion Topic: The Allure of the

### Neuroscience Perspective

Psychological explanations of behavior often seem to attract greater public interest when they include neu- roscience information. Moreover, the popular media regularly reports new neuroscience discoveries and

new applications of neuroscience findings to our physi- cal and psychological well-being as well as to politics, economics, and the law. Deena Skolnick Weisberg and her colleagues have questioned whether our fascination with the neuroscience perspective may interfere with our ability to critically consider the underlying logic

of a psychological explanation. Other lines of research have suggested that people may believe explanations because they find them intuitively satisfying, not because they are accurate. As the text reveals, human intuition is vulnerable to error.

Weisberg’s team of investigators tested their hypothesis by giving naive adults, students in a neuro- science course, and neuroscience experts brief descrip- tions of behavioral phenomena followed by one of four types of explanations, according to a 2 (good explana- tion versus bad explanation) 2 (without neuroscience versus with neuroscience) design. Importantly, the neuroscience information was in all cases irrelevant

(as confirmed by the neuroscientists) to the logic of the explanation.

For example, the research team described the well- established false consensus effect (the tendency to over- estimate the extent to which others share our beliefs

and behaviors) as 1 of the 18 behavioral phenomena. More specifically, the researchers cited our tendency to assume that others know what we know, some-

times called the *curse of knowledge.* They then offered

four explanations following the experimental design described previously.

The good explanation (based on careful research) without neuroscience: “Researchers claim that this curse happens because subjects have trouble switching

their point of view to consider what someone else might know, mistakenly projecting their own knowledge unto others.” (Deena Skolnick Weisberg, Frank C. Keil, Joshua Goodstein, Elizabeth Rawson, Jeremy R. Gray,

‘The Seductive Allure of Neuroscience Explanations’, Journal of Cognitive Neuroscience, 20:3 (March, 2008), pp. 470-477. © 2008 by the Massachusetts Institute of Technology.)

The bad explanation (circular restatement of the phenomenon and thus not explanatory) without neu- roscience: “Researchers claim that this curse happens because subjects make more mistakes when they have to judge the knowledge of others. People are better at judging what they themselves know.”

The neuroscience statement added to the above explanations was “Brain scans indicate that this curse happens because of frontal lobe brain circuitry known to be involved in self-knowledge.”

The results indicated that research participants in all three groups (naive adults, students in a neurosci- ence course, and neuroscience experts) reported that good explanations were more satisfying than bad ones. However, those in the two nonexpert groups also

judged that explanations with logically irrelevant neuro- science information were more satisfying than explana- tions without. The neuroscience statements had a par- ticularly significant effect on nonexperts’ judgments of bad explanations, apparently masking otherwise salient problems in these explanations.

Weisberg, D. S., Keil, F. C., Goodstein, J., Rawson, E.,

& Gray, J. R. (2008). The seductive allure of neurosci- ence explanations. *Journal of Cognitive Neuroscience.*

*20,* 470–477.

### Lecture/Discussion Topic: Complementary Perspectives

The notion that different perspectives are not neces- sarily contradictory but can in fact complement one another is important and can be further developed in class. A simple illustration suggested by Stephan Evans, a philosopher who has written much on the philosophy of science in psychology, may be helpful.

Have students imagine a poem that has been hand- written with a pen. It is possible to describe the poem

in strictly physical terms as a set of ink marks on paper. This description could be made even more basic by pro- viding a chemical analysis of the ink and paper. Such a description could be very useful if someone wished to know whether the poem is likely to fade and become illegible over the years. A third level of description would be to view the poem as a collection of letters of

the English alphabet. A fourth would be to view the poem as a collection of English words. Finally, some- one might describe the poem as a literary creation.

In analyzing these different descriptions, should

we ask, “Which one is true?” Of course not. While they state very different things, they are complementary. Each account is accurate and potentially useful. They are simply different ways of looking at the same event.

Similarly, the different perspectives in psychology are not necessarily contradictory. They are often differ- ent ways of looking at the same behavior. The various academic disciplines, too, offer complementary per- spectives on human experience. Which one is most rele- vant depends on your major interest. For example, love is described in innumerable ways. A physiologist might describe love as a state of arousal. A psychologist might examine how the emotion of love is influenced by such factors as belief similarity or physical attractiveness. A poet might extol the sublime experience that love can sometimes be. A theologian might describe love as the goal, the God-given epitome of human relationships. Successful explanations of human functioning at one level need not invalidate explanations at other levels.

Evans, C. S. (1982). *Preserving the person*. Grand

Rapids, MI: Baker Book House.

### Lecture/Discussion Topic: Human Freedom and Choice

Does the biopsychosocial approach that incorporates the three main levels of analysis allow for human free- dom and choice? Or, are we totally shaped by our biol- ogy and past and present environment?

Clearly, the belief that we cannot affect our own behavior can produce disastrous results. Psychologist Janice Hastrup cites the intriguing case of Mickey Mantle, star centerfielder for the New York Yankees, whose belief in genetic determinism probably cost him years. Mantle’s father died at age 40 from Hodgkin’s disease; several uncles also died before age 40. According to Hastrup, Mantle started thinking, “I prob- ably am going to die young, so I might as well enjoy myself.” A 46-year-old Mantle lamented, “If I knew I was going to live this long I would have taken better care of myself.” The Hall-of-Famer with an alcohol use disorder, whose hedonistic behavior caused irreparable liver damage, died in 1995 at the relatively young age

of 63. Hastrup suggests that it was Mantle’s belief and not necessarily any genetic predisposition that caused his early demise. Today, about one-third of the popula- tion shares Mantle’s narrow outlook regarding family history of disease. It is sometimes called “one-factor health reasoning.”

Morton Hunt suggests that mainstream modern psychology that includes terms such as *purposive behavior, intentionality, decision making, self- control, choices,* and *self-efficacy* leaves room for a

psychology of will. Social cognitive theorist Albert Bandura proposes a *psychology of agency* in which he argues that we act as agents who intentionally regulate our own behavior and life circumstances. In a 2004 address to the American Psychological Society, he stated that humans are “producers of their life circum- stances not just products of them.” For example, he notes that research on brain development underscores the influential role that agentic action plays in shaping the function and structure of the brain. He states, “It is not mere exposure to stimulation but agentic action in exploring, manipulating, and influencing the environ- ment that counts. By regulating their motivation and activities, people produce the experiences that form the

functional neurobiological substrate of symbolic, social, psychomotor, and other skills.” (Bandura, A., excerpt from “Toward a Psychology of Human Agency” from PERSECPTIVES ON PSYCHOLOGICAL SCIENCE,

1, 2006. Copyright © 2006 by SAGE Publications, Inc. Reproduced with permission of SAGE Publications, Inc. Journals. Permission conveyed through Copyright Clearance Center, Inc.)

Bandura identifies four key properties of human agency. The first is *intentionality*. Human intentions include action plans and strategies for carrying them out to reach a goal. A second property of agency is *forethought*, which involves the temporal extension of agency. Through cognitive representation, visualized futures are brought into the present to guide and moti- vate our behavior. *Self-reactiveness* is a third agentic property. Not only do we have the capacity to make choices and action plans, we also have the ability to execute them, that is, to link our thoughts with actions. The fourth property of agency, argues Bandura, is

s*elf-reflectiveness.* We are self-examiners of our own functioning. We reflect on our personal efficacy, the soundness of our thoughts and actions, and the meaning of our pursuits. We make adjustments, if necessary.

Bandura also argues that people do not simply react to changes in evolution. Rather, “they are prime movers in the coevolution process . . . the uniqueness of humans resides in these self-directing and self- transforming capacities.” As agents of their own devel- opment, people have “devised ways of adapting flexibly to remarkably diverse geographic, climatic, and social environments.” Many psychologists would agree. We

are both creators and creatures of our personal and social worlds.

Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on psychological science, 1,*

164–180.

Jaffe, E. (2004, September). Mickey Mantle’s greatest error. *APS Observer,* 37.

Volpe, K. (2004, September). Toward a psychology of agency. *APS Observer,* 13–14.

## Subfields

### Student Project: Exposure to the Fields of Psychology

To help students better understand the fields of psychol- ogy, Amanda Maynard, Douglas Maynard, and Kirsten Rowe (2004) designed an assignment that includes an overview of psychology and an introduction to campus research sources, as well information about careers in psychology. Students (individually, in pairs, or in small groups) will research several subfields of psychology, then present their findings on a poster and/or in a sum- mary report. This assignment is best introduced at the beginning of the term, students work on it as the course progresses, and the final project is presented at the end of the term.

This exercise can be expanded to include instruc- tion in information literacy and the technological skills that students will need in school and in life. How

much of this you include depends on the needs of your students. Work with your librarians to help students develop the necessary information literacy and research skills, such as being able to discriminate Internet infor- mation that is authoritative, accurate, and current. You or the librarian could introduce students to psychology databases such as PsycINFO, which will teach students how to locate and differentiate primary and secondary sources on a subfield of psychology not assigned in class. Instruction followed by an immediate opportunity for practice in the assignment may help students see the usefulness of website evaluation and literature search

in professional work. Courses emphasizing the profes- sional use of technology may consider adapting the project to an oral presentation using software such as PowerPoint or Prezi. Your campus IT person can help students with software.

Handouts 5a and 5b are the assignment sheets and

Handout 5c is the poster activity form.

Maynard, A. M., Maynard, D. C., & Rowe, K. A. (2004). Exposure to the fields of psychology: evaluation of an introductory psychology project. *Teaching of Psychology, 31*(1), 37-40. doi: 10.1207/ s15328023top3101\_9.

### Student Project: Interviewing a Psychologist

Appendix B in these resources includes a project for students to learn more about psychology’s subfields by interviewing your colleagues. If you want to use it now, see Appendix B in these resources.

### Classroom Exercise: Psychologist as Scientist

Many students view psychologists as strictly mental health professionals. While they know that at least a

few teach (after all, you’re there), most will be unaware of the large percentage who conduct research. Gene Smith (1982) suggests a simple exercise to highlight

this clinical bias. Simply ask students to write on a

piece of paper five adjectives that describe a typical sci-

entist. Next, ask them to write down five adjectives that describe a typical psychologist.

When students are invited to present their adjec- tives to the class, it will be obvious that they perceive “psychologist” and “scientist” very differently. Smith reports that among the words students used to describe “psychologist” were accepting, caring, genuine, person- able, and attentive. Among the words used to describe “scientist” were methodical, analytical, resourceful, intelligent, and thorough. The exercise awakens stu- dents to their misconception of what a psychologist

is and provides you with the opportunity to introduce psychology as the science of behavior and mental pro- cesses.

Buddy Grah (1994) suggests an alternative for introducing psychology as a science. Distribute to each student a piece of paper on which you have drawn

a straight horizontal line and written “Physics and Chemistry” at one endpoint and “Art and Philosophy” at the other. Suggest that the line represents a con- tinuum along which the various disciplines can be placed and that each student should place psychology on the continuum. You can obtain a class judgment by drawing a line on the chalkboard; then, starting at one end, have students raise their hands when you reach

the point where they have placed psychology. Stop

at the point where approximately half the class raises their hands and mark that location. Grah reports that his students tend to place psychology closer to art and

philosophy than to physics and chemistry. Ask students why they have placed it where they have.

Grah, B. (1994, August). Student intuitions re science: A classroom exercise. *Teaching in the Psychological Sciences* (TIPS—Online Discussion Group).

Smith, G. F. (1982). Introducing psychology majors to clinical bias through the adjective generation technique. *Teaching of Psychology, 9*(4), 238–239.

### Classroom Exercise: Personalizing Psychology in

### Current Events

The world is our classroom! In today’s “wired world,” we learn about every current event as it happens from the news media, social media, and from one another. Why not personalize your students’ interactions with psychology by using current events to highlight the role that our discipline can play in understanding the causes, implications, and solutions to these events?

Begin by having your class generate a list of cur- rent events. These can be local, national, or global events. Write them on the board. Then, divide your class into small groups and assign each group one of the events on the list (it is best to assign the events randomly, and to assign each group a different event). Instruct your students to imagine that they are psychol-

ogists, and give each group about 15 minutes to answer the following questions.

1. What theoretical perspectives in psychology are relevant to this current event?

2. Identify (name and define) at least five variables that psychologists would deem important or nec- essary to study in order to understand the current event scientifically and more fully?

3. How could you bring psychological issues related to this current event into the laboratory to study them in a more controlled environment? Give at least one example.

If you have time, randomly select one or two groups to share their responses with the rest of the class. You may want to follow this classroom activity with a homework assignment in which students work

individually through the above questions about a differ- ent current event of their choice.

### Lecture/Discussion Topic: Psychology’s Important Role in Basic Scientific Research

What is psychology’s role in answering important sci- entific questions? To illustrate both the broad range of psychology and its centrality as a scientific discipline, use the *New York Times’* twenty-fifth anniversary cel- ebration of its weekly section “Science Times.” When the *Times* listed “25 of the most provocative questions facing science” on November 10, 2003, psychologist Donald McBurney astutely noted that at least 9 of the

25 questions are issues on which psychology has some- thing important to say. These include the following:

Is war our biological destiny? How does the brain work? What should we eat?

Are men necessary? Women? Can robots become conscious? Why do we sleep?

How smart are animals? Can drugs make us smart? Does the paranormal exist?

### Lecture/Discussion Topic: Psychology’s Applied

### Research

To illustrate psychology’s relevance for our everyday lives, here are some examples of the application of psy- chological principles. Some of these issues will be dis- cussed in more detail later in the text, but mentioning them now will give students a preview of how psychol- ogy applies to real life.

1. Suicide is the third leading cause of death for

young people ages 10 to 24. Psychological research indicates that psychological, environmental, and social factors contribute to suicide risk. Warning signs include talking about dying; recent loss (through death, divorce, separation); isolation; depression; changes in sleep patterns, eating habits,

and the capacity to concentrate; fear of losing con- trol; and no hope for the future. The TeenScreen Program shut down in 2012 without giving a reason, although critics maintain that the program does not work. A program that has proven helpful in preventing suicide is Stop a Suicide Today!

Stop a Suicide Today! (stopasuicide.org) is a school-based prevention program with documented success in reducing suicide attempts. The program teaches participants to recognize the signs of sui- cide in family members, friends, and co-workers and empowers them to make a difference in the lives of their loved ones. The program teaches the relationship between psychological disorder and suicide and supports participants in getting those who they recognize to be in need into psychothera- py.

Berman, A., Jobes, D., & Silverman, M., (2006).

*Adolescent suicide: Assessment and intervention*

(2nd ed.). Washington, DC: American Psychological

Association.

Beautrais, A. (2005). National strategies for the reduction and prevention of suicide. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 26*(1), 1–3.

2. Psychologists have shown how the pursuit of material wealth and the pursuit of happiness are not the same. Psychologists Edward Diener and David Myers have clearly documented that once individuals have enough money to pay for their

basic needs of food, shelter, and so on, money does relatively little to improve happiness. Psychologist Tim Kasser has shown that people who buy into

the messages of consumer culture actually report lower personal well-being. He found that individu- als who say that money, image, and popularity are relatively important to them report less satisfaction in life as well as more depression and anxiety. A movement known as Voluntary Simplicity aims to help people live outside the consumer mainstream. Many in this movement try to maximize their “time affluence” rather than their material affluence, because they recognize that increased free time will bring them a greater sense of well-being.

Kasser, T. (2002). *The high price of materialism.*

Cambridge, MA: MIT Press.

Myers, D. (2000). The funds, friends, and faith of happy people. *American Psychologist, 55,* 56–67.

3. Researchers are discovering the types of messages that shape pro-environment behaviors. Robert Cialdini and two graduate students worked with a local hotel on a program to encourage lodgers to reuse bath towels. They tried the following mes- sages: Help the hotel save energy; Help save the

environment; Partner with us to help save the envi- ronment; Help save resources for future genera- tions; and, Join your fellow citizens in helping to save the environment.

The last message, which described a social norm, was the most successful: 41 percent of guests who got that message recycled their tow- els. The least successful message was the one that emphasized the benefit to the hotel (Help the hotel save energy): Only 20 percent of the guests reused their towels. The findings are consistent with

social psychological theory suggesting that people in a new situation take their cues from others. Descriptive norms that say, “Everybody’s doing it!” seem to promote conservation-minded behav- iors.

In related research on situations requiring people *not* to do something, investigators have found that injunctive-proscriptive messages (Don’t go off the trail or Don’t take the petrified wood) may be the most effective, direct route to gaining compliance.

Still other research finds that the typical “save the planet” awareness campaigns are ineffective due to their lack of specificity. Specific messages are much more likely than abstract messages to shape behavior.

Cialdini, R. B. (2003). Crafting normative messages to protect the environment. *Current Directions in Psychological Science, 12,* 105–109.

Cialdini, R. B., Barrett, D. W., Bator, R., Demaine, L., Sagarin, B. J., Rhoads, K. V. L., et al. Activating and aligning social norms for persuasive impact. (Manuscript submitted for publication.)

4. Writing about difficult, even traumatic, experi- ences appears to be good for health. In one study,

50 healthy undergraduates were assigned to write about either traumatic experiences or superficial topics for four days in a row. Six weeks after the writing sessions, students in the trauma group reported more positive moods and fewer illnesses than those writing about everyday experiences. In another study, researchers assigned patients with asthma and rheumatoid arthritis either to write about the most stressful events of their lives or

to write about a neutral topic. Four months later, asthma patients in the experimental group showed improved lung function; arthritis patients in the experimental group showed a reduction in disease severity. Writing seems to be one important way for people to resist the mental and physical rav- ages of stress and disease. Therapists increasingly encourage patients to undertake writing exercises outside the clinical setting.

Pennebaker, J. W. (1997). *Opening up: The healing power of expressing emotion.* New York: Guilford Press.

Smyth, J. M., Stone, A. A., Hurewitz, A., & Kaell, A. (1999). Effects of writing about stressful experi- ences on symptom reduction in patients with asthma or rheumatoid arthritis. *Journal of the American Medical Association, 281,* 1304–1309.

5. Psychological research indicates that violent video games can increase children’s aggression. Studies indicate that it is likely that violent video games may have even stronger effects on children’s aggression than television or movies because

(1) the games are highly engaging and interac- tive, (2) the games reward violent behavior, and (3) children repeat these behaviors over and over as they play. Researchers have shown that playing a lot of violent video games is related to having more aggressive thoughts, feelings, and behaviors. When parents limit the amount of time as well

as the types of games their children play, chil- dren are less likely to show aggressive behaviors. Some researchers have created school curricula

to help teach children to reduce their total amount of screen time and/or the types of programs and games watched/played.

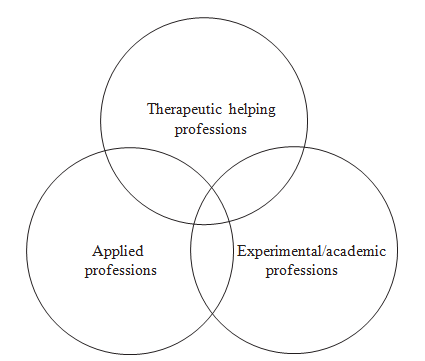
Gentile, D. A., & Anderson, C. A. (2003). Violent video games: The newest media violence hazard. In D. A. Gentile (Ed.), *Media violence and children.* Westport, CT: Praeger.

Gentile, D. A., Lynch, P. J., Linder, J. R., & Walsh, D. A. (2004). The effects of violent video game habits on adolescent aggressive attitudes and behaviors. *Journal of Adolescence, 27,* 5–22.

6. Most psychologists agree that polygraph tests can- not accurately detect lies. Indeed, research cannot find any pattern of physiological reactions that

is unique to deception. An honest person may be nervous when answering truthfully and a dishonest person may be calm. A particular problem is that polygraph research has not separated placebolike effects (the individual’s belief in the efficacy of the procedure) from the actual relationship between deception and a person’s physiological responses. One reason that polygraph tests may *appear* to be accurate is that people who believe the test works may confess or become very anxious when ques- tioned. If this view is correct, the lie detector might be better called a “fear” detector. Courts, including the U.S. Supreme Court, have repeatedly rejected the use of polygraph evidence because of its inher- ent unreliability. Nevertheless, polygraph testing continues to be used in nonjudicial settings, often

to screen personnel, but sometimes to try to assess the veracity of suspects and witnesses, and to mon- itor criminal offenders on probation.



Kozel, F. A., Padgett, T. M., & George, M. S. (2004). A replication study of the neural correlates of deception. *Behavioral Neuroscience, 118*(4), 852–856.

Lykken, D. (1998). *A tremor in the blood: Uses and abuses of the lie detector* (2nd ed.). New York: Perseus.

National Academy of Sciences (2002). *The polygraph and lie detection.* Washington, DC: National Academy Press.

### Classroom Exercise: Categorizing Professions in

### Psychology

Many students find it difficult to distinguish among psychology’s subfields, perspectives, and professions. They come into our courses thinking about professions and career choices (trying to answer the question of “What do I want to be when I grow up?”), but they

do not always see the connection between the profes- sions and the theoretical perspectives and psychological subfields that inform those professions. This exercise allows them to begin to disentangle these categories.

For this activity, begin by having students generate a list of all the professions they can think of that make use of psychology in some way. For each profession your students identify, have them explain how or why

it is related to psychology. They can do this individu- ally or as part of a small group, whichever works best for your class configuration. When students have cre- ated their lists, refer them to the Venn diagram above. Have students generate a definition for each area in the diagram. Then have them place each profession on their list in one of the areas in the diagram. They should be prepared to defend their placement of the professions,

that is, to have a good reason why they have placed each profession where it is.

You can make this activity more challenging by modifying the Venn diagram to include information about the different subdisciplines within psychology. One way to do this is to color-code the professions to indicate which theoretical perspectives or psychological subfields dominate the work in each profession (e.g., by changing the font colors, highlighting or underlining the professions in different colors, or using icons next to

the professions). You can then discuss the similarities and differences in the number and type of subfields rep- resented under each profession in the diagram. If you would prefer to do this in a matrix rather than a Venn diagram, you can easily do so.

You can make this an ongoing project that lasts the entire term. If you use concept mapping or wiki tools available through classroom management systems (e.g., Blackboard, Moodle, Canvas) or on free websites, you can even chart the evolution of this document over time.

## Study Tips

### Classroom Exercise: Eliciting “Metaphors” for

### Learning and Teaching

To set the tone for active learning and critical thinking in the course, you might use a simple classroom exer- cise suggested by Carole Wade. Begin by asking stu- dents why they are in college or university instead of in the workplace or even at home watching TV. Precisely what do they hope to gain, aside from the ultimate goal of earning a degree? Explain to your class that they will

have the opportunity to explore their ideas about learn- ing by writing similes or providing an analogy. (You may need to explain that a simile is a figure of speech in which a concept is applied to something else to sug-

gest a fundamental similarity, such as “My love is like a red, red rose.”) Have students write on a piece of paper

a way to complete the phrase, “Learning is like . . .” or “A learner is like . . . .” After a few minutes, have them do the same thing for “teaching” and “teacher.” (Note that Carole Wade, in her presentation, refers to these as metaphors, but, in fact, they are similes.)

To ensure anonymity, collect, shuffle, and redis- tribute the responses. Ask for volunteers to read the similes on their sheet and then use them as the basis

for classroom discussion. What do the answers suggest

about students’ concepts of learning and teaching? Are they active or passive? Do not be too harsh with similes suggesting that learning is passive (for example, “A learner is like a sponge”), but do emphasize that active processing is necessary to master any subject. To bor- row David Myers’ simile: “Your mind is not like your stomach, something to be filled passively; it is more

like a muscle, which grows stronger with exercise.” Conclude by noting that teachers are also learners and that learners can also be teachers.

Wade, C. (1992, August). Metaphors for learning and teaching. Paper presented at the Annual Convention of the American Psychological Association, Washington, DC.