

Chapter 1

What Is Psychology?

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End-Of-Module Quiz 1.1

1. B
2. A
3. D
4. B
5. A

End-Of-Module Quiz 1.2

1. D
2. A
3. C
4. C
5. D

End-Of-Module Quiz 1.3

1. D
2. B
3. A
4. B
5. A

End-Of-Module Quiz 1.4

1. C
2. C
3. B
4. A
5. C

End-Of-Module Quiz 1.5

1. A
2. D
3. B
4. C
5. A

End-of-Chapter Quiz

1. B
2. A
3. D
4. A
5. B
6. B

7. C
8. A
9. D
10. A
11. D
12. A
13. C
14. D
15. A

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I. PSYCHOLOGY, PSEUDOSCIENCE, AND POPULAR OPINION (text p. 2)

Learning Objective 1.1.A – Define psychology, and describe how it addresses topics from a scientific perspective.

- A. What psychology is
 1. Psychology is the discipline that is generally concerned with behavior and mental processes and how they are affected by an organism’s physical state, mental state, and external environment.
 2. Scientific psychology is based on research and empirical evidence, which is gathered by careful observation, experimentation, and measurement.

Learning Objective 1.1.B – Provide examples of pseudoscience, psychobabble, popular opinion, and “plain old common sense” related to psychological topics, and describe how scientific psychology would address such claims.

- B. What psychology is not.
 1. Many pop-psych ideas have filtered into the media, education, and even the law.
 - a. We need to develop an ability to distinguish between psychobabble and serious psychology, and between unsupported *popular opinion* and findings based on *research evidence*.
 2. Psychological findings sometimes validate common beliefs and then explain or extend them.
 3. Psychological researchers strive not only to discover new phenomena and correct mistaken ideas but also to deepen our understanding of an already familiar world.

- *Lecture Launcher 1.1: Psychology and Common Sense*
- *Lecture Launcher 1.2: Psychology In the Framework of Emerging Transdisciplinary Science*
- *Activity 1.1: Inference or Observation?*
- *Activity 1.2: Pseudopsychology and the Mozart Effect*
- *Handout 1.1 – Inference or Observation?*

Answers to Quiz for Module 1.1

1. B
2. A
3. D
4. B

5. A

II. THINKING CRITICALLY AND CREATIVELY ABOUT PSYCHOLOGY (text p. 6)

Learning Objective 1.2.A – Explain why critical thinking applies to all scientific pursuits, and also why it should guide everyday judgements and decision making.

A. Critical thinking is the ability and willingness to assess claims and make judgments on the basis of well-supported research.

- *Lecture Launcher 1.3: How Do We Know What We Know?*
- *Activity 1.3: Find the Flaw*
- *Handout 1.2 – Find the Flaw*
- *Activity 1.4: Applying Critical Thinking Guidelines*
- *Handout 1.3 – Applying Critical Thinking Guidelines*
- *Activity 1.5: Let Me Tell You a Story*
- *Handout 1.4 – Let Me Tell You a Story*
- *Activity 1.6: Contradictory Beliefs*

Learning Objective 1.2.B – List eight important critical thinking guidelines and give an example of how each applies to the science of psychology.

B. Eight guidelines for critical thinking

- *Lecture Launcher 1.4: The Characteristics of Good Reasoners*
 1. Ask questions; be willing to wonder.
 2. Define terms clearly.
 3. Examine the evidence.
 4. Analyze assumptions and biases.
 5. Avoid emotional reasoning.
 6. Avoid oversimplification.
 7. Consider alternative interpretations.
 8. Tolerate uncertainty.

Answers to Quiz for Module 1.2

1. D
2. A
3. C
4. C
5. D

III. PSYCHOLOGY'S PAST: FROM THE ARMCHAIR TO THE LABORATORY (text p. 14)

Learning Objective 1.3.A – Discuss some of the pre-psychological approaches to explaining psychological topics, from ancient times through the early 1800s.

- A. All psychologists want to describe, predict, understand, and modify behavior in order to add to human knowledge and increase human happiness.
- B. Early Psychologists

- *Lecture Launcher 1.5 - The Study of Bumps on the Head*
 1. Did not rely heavily on empirical evidence; often their observations were based simply on anecdotes or descriptions of individual cases
 2. Phrenology
 - a. Greek for “study of the mind”
 - b. Popular in Europe and the United States in the 1800s
 - c. Discredited theory that different brain areas account for character and personality traits, and can be “read” from bumps on the skull

Learning Objective 1.3.B – Explain Wilhelm Wundt’s contributions to the birth of modern psychology.

C. The Birth of Modern Psychology

- *Lecture Launcher 1.7 - Wundt’s Other Method: Historical and Cultural Psychology*
 1. Wilhelm Wundt
 - a. In 1879, established the first psychological laboratory in Leipzig, Germany
 - b. Trained *introspection*—technique by which participants were trained to describe their own sensations, mental images, and emotional reactions

Learning Objective 1.3.C – Compare the three early psychologies of structuralism, functionalism, and psychoanalysis, and identify the major thinkers who promoted each of these schools of thought.

D. Three Early Psychologies

- *Lecture Launcher 1.6 - Brief Biographical Profiles of Major Contributors to Psychology*
- *Lecture Launcher 1.8 - Dates in the Development of Psychoanalysis*
- *Activity 1.7: A Jigsaw Puzzle Approach to Learning the Early History of Psychology*
- *Activity 1.8: Which Famous Psychologist Am I?*
 1. Structuralism
 - a. E.B.Titchener (student of Wundt) popularized Wundt’s ideas in the United States
 - b. Like Wundt, structuralists hoped to analyze sensations, images, and feelings into basic elements.
 - c. Reliance on introspection led to conflicting reports.
 2. Functionalism
 - a. William James interested in *how* and *why* behavior occurs; causes and consequences of behavior
 - b. Influenced by Darwin and asked how certain attributes enhance survival and adapt to the environment
 - c. Used a variety of methods and studied a broader range of subjects
 3. Psychoanalysis
 - a. Sigmund Freud
 - i. Believed that patients’ symptoms had mental, not bodily, causes
 - ii. Unconscious part of mind has strong influence on behavior

Answers to Quiz for Module 1.3

1. D
2. B

3. A
4. B
5. A

IV. PSYCHOLOGY'S PRESENT: THE FOUR PERSPECTIVES OF PSYCHOLOGICAL SCIENCE (text p. 18)

Learning Objective 1.4.A – List and describe the four major perspectives in psychology.

A. The major psychological perspectives

➤ *Lecture Launcher 1.11 - Over the Edge*

1. The biological perspective
 - a. Examines how bodily events affect behavior, feelings, and thoughts
 - b. Related to evolutionary psychology, which examines how evolutionary past may explain some present behaviors and psychological traits
2. The learning perspective
 - a. Behaviorism
 - i. Examines how the environment and experience affect the behavior of human beings (and other animals)
 - ii. Behaviorists do not invoke the mind or mental states to explain behavior.
 - iii. They study only what they can observe and measure directly: acts and events taking place in the environment.
 - b. Social-cognitive learning theories
 - i. Theorists combine elements of behaviorism with research on thoughts, values, expectations, and intentions
 - ii. Believe that people learn not only by adapting their behavior to the environment, but also by observing and imitating others and thinking about the events happening around them
3. The cognitive perspective
 - a. Emphasizes what goes on in people's heads – how people reason, remember, understand language, solve problems, explain experiences, acquire moral standards, and form beliefs
 - b. One of the strongest forces in psychology today
4. The sociocultural perspective

➤ *Lecture Launcher 1.10 - African Americans in the History of Psychology in America*

- a. Focuses on social and cultural forces outside the individual, forces that shape every aspect of behavior
- b. Social psychologists focus on social rules and roles, how groups affect attitudes and behavior, why people obey authority, and how each of us is affected by other people - spouses, lovers, friends, bosses, parents, and strangers
- c. Cultural psychologists examine how cultural rules and values, both explicit and unspoken, affect people's development, behavior, and feelings.

Learning Objective 1.4.B – Describe how feminism influenced psychology.

B. Feminist psychology

➤ *Lecture Launcher 1.9 - Women in the History of Psychology in America*

1. In 1970s, women researchers documented evidence of a pervasive bias in research methods used and in questions researchers had been asking.
2. Many studies used men as subjects.
 - a. Usually only white, middle-class men
3. Spurred the growth of research on topics including menstruation, motherhood, rape, and domestic violence, the dynamics of masculinity and femininity, gender roles, and sexist attitudes
4. Greatly advanced efforts to make psychology the study of all human beings, of all cultures and ethnicities, and other groups have made similar contributions

Answers to Quiz for Module 1.4

1. C
2. C
3. B
4. A
5. C

V. WHAT PSYCHOLOGISTS DO (text p. 22)

Learning Objective 1.5.A – Distinguish basic psychology and applied psychology, and summarize the kinds of research that various psychologists might conduct.

A. Psychological research

- *Lecture Launcher 1.12 - Using Animals in Psychological Research*
- *Lecture Launcher 1.13 - Do Psychologists Have an Obligation to Do No Harm?*
- *Activity 1.9: What Psychologists Know*
- *Activity 1.10: Thinking About Your Interests in Psychology*

1. Researchers working in basic psychology seek knowledge for its own sake.
 - a. “Pure” research
2. Researchers concerned with the practical uses of knowledge work in applied psychology.

B. Major nonclinical specialties in psychology

1. Experimental psychologists
2. Educational psychologists
3. Developmental psychologists
4. Industrial/organizational psychologists
5. Psychometric psychologists

Learning Objective 1.5.B – Compare the training and work settings of different psychological practitioners, such as counselors, clinical psychologists, psychotherapists, psychoanalysts, and psychiatrists.

C. Psychological practice

- *Lecture Launcher 1.14 - Clinical Training vs. Psychiatric Training*

1. Psychological practitioners work to understand and improve physical and mental health
2. They work in mental hospitals, general hospitals, clinics, schools, counseling centers, and private practice.
3. Types of practitioners
 - a. Counseling psychologists help people deal with problems of everyday life.
 - b. School psychologists work with parents, teachers, and students to enhance students' performance and resolve emotional difficulties.
 - c. Clinical psychologists diagnose, treat, and study mental or emotional problems.
4. People often confuse *clinical psychologist* with three other terms: *psychotherapist*, *psychoanalyst*, and *psychiatrist*.
 - a. A “psychotherapist” is anyone who does any kind of psychotherapy. The term is not legally regulated; in most states, anyone can claim to be one.
 - b. A psychoanalyst is a person who practices psychoanalysis. To call yourself a psychoanalyst, you must have specialized training from a psychoanalytic institute and undergo extensive psychoanalysis yourself
 - c. A psychiatrist is a medical doctor who has done a three-year residency in psychiatry to learn how to diagnose and treat mental disorders.
 - i. Because of their medical training, are more likely to focus on possible biological causes of mental disorders and to treat these problems with medication.
 - d. Social workers and counselors usually have a Master’s degree in social work or psychology.

Learning Objective 1.5.C – Give examples of three ways in which psychologists contribute to their communities.

- D. Psychology in the community
 1. Psychologists contribute to the welfare of their communities by helping out within their areas of expertise.

Answers to Quiz for Module 1.5

1. A
2. D
3. B
4. C
5. A

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► Learning Objectives

After studying this chapter, students should be able to understand the following principles:

Psychology, Pseudoscience, and Popular Opinion

- 1.1.A – Define psychology, and describe how it addresses topics from a scientific perspective. (text pp. 3-4)
- 1.1.B – Provide examples of pseudoscience, psychobabble, popular opinion, and “plain old common sense” related to psychological topics, and describe how scientific psychology would address such claims. (text pp. 4-5)

Thinking Critically and Creatively About Psychology

- 1.2.A – Explain why critical thinking applies to all scientific pursuits, and also why it should guide everyday judgments and decision making. (text pp. 6-7)
- 1.2.B – List eight important critical-thinking guidelines and give an example of how each applies to the science of psychology (text pp. 7-13)

Psychology's Past: From the Armchair to the Laboratory

- 1.3.A – Discuss some of the pre-psychological approaches to explaining psychological topics, from ancient times through the early 1800s. (text pp.14-15)
- 1.3.B – Explain Wilhelm Wundt's contributions to the birth of modern psychology. (text p. 15)
- 1.3.C – Compare the three early psychologies of structuralism, functionalism, and psychoanalysis, and identify the major thinkers who promoted each of these schools of thought. (text pp. 16-17)

Psychology's Present: The Four Perspectives of Psychological Science

- 1.4.A – List and describe the four major perspectives in psychology. (text pp.18-20)
- 1.4.B – Describe how feminism influenced psychology (text pp. 20-21)

What Psychologists Do

- 1.5.A – Distinguish basic psychology and applied psychology, and summarize the kinds of research that various psychologists might conduct. (text pp. 22-23)
- 1.5.B – Compare the training and work settings of different psychological practitioners, such as counselors, clinical psychologists, psychotherapists, psychoanalysts, and psychiatrists. (text pp. 23-25)
- 1.5.C – Give examples of three ways in which psychologists contribute to their communities. (text pp. 25-26)

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► Rapid Review

Chapter 1 defines psychology and traces the historical and disciplinary roots of the field to its current perspectives, specializations, and professional activities. Critical thinking guidelines are described, and students are encouraged to understand and apply these concepts as they read the text. The complexity of human behavior requires that psychology students resist simplistic thinking and reject overly simple answers. Four current perspectives and one important overarching movement are identified. The current perspectives include the biological perspective, learning perspective, cognitive perspective, and sociocultural perspective. The overarching movement is the feminist movement. Each of these systems reflects a different emphasis and approach to understanding human behavior. Students are encouraged to think about human behavior from each different perspective and use their critical thinking skills to compare and contrast these approaches. A review of the specialty areas within the field helps students appreciate that psychology includes vastly diverse topics and that psychologists are engaged in a wide variety of occupations. Examples of specializations include experimental psychology, educational psychology, developmental psychology, and industrial/organizational psychology. The practice of psychology, which helps people with mental health problems, is discussed along with a description of types of practitioners within the field of psychology (e.g., counseling psychologists, school psychologists)

and those outside of it. Although psychologists have different orientations and different occupational activities, all of them share a fascination with the human mind and behavior. They also stress the importance of empirical evidence that is so critical to making psychology a science.

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▼ LECTURE LAUNCHERS AND DISCUSSION TOPICS

- 1.1 – Psychology and Common Sense
- 1.2 – Psychology in the Framework of Emerging Transdisciplinary Science
- 1.3 – How Do We Know What We Know?
- 1.4 – The Characteristics of Good Reasoners
- 1.5 – The Study of Bumps on the Head
- 1.6 – Brief Biographical Profiles of Major Contributors to Psychology
- 1.7 – Wundt’s Other Method: Historical and Cultural Psychology
- 1.8 – Dates in the Development of Psychoanalysis
- 1.9 – Women in the History of Psychology in America
- 1.10 – African Americans in the History of Psychology in America
- 1.11 – Over the Edge
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- 1.14 – Clinical Training vs. Psychiatric Training

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Lecture Launcher 1.1 – Psychology and Common Sense

A common refrain voiced by laypeople and scientists is that most, if not all, of behavioral science “is just common sense.” Introductory psychology students are particularly apt to make this claim, given that much of their prior exposure to psychology is likely to have been very common-sensical (though perhaps not well-established) claims by a variety of “professionals” on the talk-show circuit. In a nutshell, it’s difficult to counter the “common-sense” stigma when so much of behavior seems to be explainable at an intuitive surface level.

Mark Leary shares some suggestions for discussing this issue with your students. It is true that the subject matter of psychology is much more familiar to most people than is the subject matter of subatomic physics or gastroendocrinological biology; we see behavior all around us, but rarely stumble over a gluon. Psychology would be an odd science of thought and behavior if it only considered thoughts and behaviors completely foreign to people’s experiences, or if its findings always ran counter to most people’s beliefs. But neither greater visibility of subject matter nor popular consensus guarantees greater understanding. Many people believed wholeheartedly in flat Earths and cheese moons, only to find their common-sense views dismantled in the face of scientific evidence; so too with psychology. Although most people would like to believe that large rewards produce greater liking for a boring task, that the behavior of men and women is determined by their biology, or that absence makes the heart grow fonder, researchers studying cognitive dissonance, sex-role stereotypes, and close relationships would be happy to share their findings to the contrary. In short, the popularity of a common-sense belief may not always support the weight of scientific evidence.

More importantly, psychologists (like all scientists) are primarily engaged in the task of explaining behavior, rather than merely cataloging it. The difference between theory and description—“why” versus “what”—echoes the difference between science and common sense. Common sense certainly helps describe *what* takes place in behavior, but doesn’t compel us to understand *why* it takes place. The development of theory in understanding behavior sets science apart from everyday, common-sense accounts.

Leary, M. (2004). *Behavioral research methods* (4th ed., pp. 7-8). New York: Allyn and Bacon.

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Lecture Launcher 1.2 – Psychology in the Framework of Emerging Transdisciplinary Science

Modern approaches to solving the most challenging public health problems (e.g., smoking, obesity) are beginning to develop transdisciplinary (TD) models to promote population health and reduce morbidity and mortality rates, as well as the billions of U.S. dollars spent related to these public health problems.

One-dimensional treatments for complex health problems are not successful from a public health perspective. A TD approach to solving complex public health problems requires coordinated efforts among health professionals from different backgrounds who work together to develop novel approaches to treatment and prevention efforts. It represents an evolutionary step beyond multidisciplinary treatment by encouraging scientists and clinicians to develop a common language that all participating professionals can understand. Such an approach has the potential to truly impact serious public health problems compared to a separate one. For example, smoking is a multi-determined health behavior characterized by periods of recurring use, abstinence, and relapse. Therefore, changing smoking behavior requires long-term multi-dimensional, multi-modal, intensive treatment, in which improved collaboration among health practitioners and researchers, behavioral scientists, behavioral geneticists, biologists, health policy and economy researchers, and health systems researchers can promote improved outcomes. One-dimensional approaches implemented separately from each of these disciplines cannot address the comprehensive issues of complex problems and result in wasted resources and underperforming intervention approaches.

Psychologists are in a unique position to contribute to the development of transdisciplinary science. Their training is grounded in fundamental scientific principles and theory. Psychologists’ approach to understanding and explaining complex phenomena parallels other scientific disciplines and can bridge language gaps across a broad range of scientific disciplines. Their perspective allows them to comment with expertise on human behavior, models of behavior change, and variables that influence the behavior change process and the maintenance of changed behavior. Moreover, their understanding of the process of decision making, group behavior, marketing techniques, and other specific areas can influence the process of TD intervention development, implementation, evaluation, and dissemination.

Although TD science is in its infancy, one objective is to improve translation of science to practice. One way to accelerate the process is to implement treatment studies into real world clinical settings. A well-designed treatment study with behavioral science, public health systems, policy, and practitioners can accelerate dissemination, as well as increase our understanding of the factors that influence treatment outcomes. TD treatment approaches need not be viewed as “one-size-fits-all.” Indeed, TD approaches are problem focused; hence, collaborators who design and implement programs within their system and

community may need to address unique factors that influence their patient populations. Thus, psychologists can contribute to the implementation of an intervention model to different groups of people whether groups are defined by psychopathology, community, or culture.

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Lecture Launcher 1.3 – How Do We Know What We Know?

Dependence on observation is one of the hallmarks of science, but it is not the only way humans acquire knowledge. There are, in fact, many questions that cannot be answered by scientific methods and for which other means of acquiring knowledge are more appropriate. Begin your discussion by asking students the following questions:

- How do you know that George Washington was the first president of the United States?
- How do you know that you really have a stomach?
- What makes you so sure the sun will rise tomorrow?
- How do you know the color of the shirt I'm wearing?
- How can you be sure that there aren't little creatures inside computers that are responsible for the things computers do?
- Are you sure you don't have a big hole in the back of your pants or skirt?

Authority is one source of knowledge. We know, or believe, that Washington was the first president because we trust the authority of historians and history books. During the centuries that Western civilization was dominated by the Church, the authority of holy writings was believed to be the only dependable way of knowing.

Reason was considered by Renaissance scholars to be the most reliable source of knowledge. If you say, "All humans have stomachs; I am human; therefore, I have a stomach," you have used deductive reasoning. If you say, "The sun rose today, yesterday, the day before yesterday, and for as long as I or anyone can remember," you are using inductive reasoning.

Observation is yet another way of acquiring knowledge. You know the color of my shirt because you can see the shirt. You assume that you do not have a hole in the posterior of your clothing because you have not observed stares and giggles from others.

One might use any of these ways of knowing to deny the existence of little creatures in computers. People you perceive to be authorities about computer innards may have told you how they work. You may have reasoned that creatures need nourishment and there is no food supply inside microprocessors. Or you may have looked inside a computer and failed to see little creatures waiting to solve your problems. But there is no way one can absolutely refute the computer-creature hypothesis; so if you want to keep your computer running, maybe you should find out what the little creatures eat.

All these ways of knowing—authority, reason, and observation—are used by scientists, but observation must be the basis for knowledge that is scientific. Science puts greater emphasis on evidence provided by the senses than on authority of others or reasoning. In short, science relies on empirical evidence.

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Lecture Launcher 1.4 – The Characteristics of Good Reasoners

Reasoning skills are a central component of critical thinking (along with the other skills and dispositions described in Chapter 1 of the text). The following characteristics of good and bad reasoners are from Richard W. Paul and Gerald M. Nosich, “Using intellectual standards to assess student reasoning,” in R. W. Paul, *Critical thinking: What every person needs to survive in a rapidly changing world* (2nd ed.), Rohnert Park, CA: Foundation for Critical Thinking, 1992.

Characteristics of Good Reasoners

- 1. Reasoning has a purpose. Good reasoners:**
 - state their purpose clearly
 - distinguish it from related purposes
 - adopt realistic and significant purposes and goals
 - monitor their thinking for consistent goals

- 2. Reasoning is an attempt to figure something out, to settle some question, to solve some problem. Good reasoners:**
 - are clear about the question they are trying to settle and can express it clearly
 - can break a question into subquestions
 - distinguish significant from trivial, and relevant from irrelevant questions
 - distinguish questions they can answer from questions they can't
 - are sensitive to the assumptions built into the questions they ask

- 3. Reasoning is done from some point of view. Good reasoners:**
 - keep in mind that people have different points of view, especially on issues that are controversial
 - consistently articulate other points of view and reason from within those points of view
 - seek other viewpoints, especially when the issue is one they believe in passionately
 - have insight into areas and problems where they are most likely to be prejudiced

- 4. All reasoning is based on data, information, evidence. Good reasoners:**
 - assert a claim only when they have sufficient evidence to back it up
 - can articulate and therefore evaluate the evidence behind their claims
 - actively search for information *against* (not just *for*) their own position
 - key in on relevant information and disregard information or data that are irrelevant to the question at issue
 - draw conclusions only to the extent that they are supported by the data
 - state their evidence clearly and fairly

- 5. Reasoning is expressed through, and shaped by, concepts and ideas. Good reasoners:**
 - are aware of the key concepts and ideas they use
 - are able to explain the basic implications of the key words and phrases they use
 - are able to distinguish their special, nonstandard uses of words from standard uses

- are aware of irrelevant concepts and ideas
- use concepts and ideas in ways relevant to their functions
- can distinguish superficial from deep concepts

6. Reasoning is based on assumptions. Good reasoners:

- make assumptions that are clear
- make assumptions that are reasonable
- make assumptions that are consistent with each other

7. Reasoning leads somewhere, has implications and consequences. Good reasoners:

- clearly articulate significant implications and consequences of their reasoning
- search for negative as well as for positive consequences
- anticipate the likelihood of unexpected negative and positive implications

8. Reasoning contains inferences by which we give meaning to data and come to conclusions. Good reasoners:

- make inferences that are clear and precise
- usually make inferences that follow from the evidence or reasons presented
- often make inferences that are deep rather than superficial
- often make inferences or come to conclusions that are reasonable
- make inferences or come to conclusions that are consistent with each other

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Lecture Launcher 1.5 – The Study of Bumps on the Head

Franz Joseph Gall (1758-1828) was a skilled brain anatomist whose descriptions of the brain’s gray and white matter, cerebral commissures, and contralateral innervation remain an important part of the knowledge base of neurology and psychology. Also, Gall was among the first to discuss the relationship between brain and behavior. Unlike the dualism of Descartes, Gall’s view asserted that the mind was located in the brain. His studies of the brains of animals and of people of various ages and types indicated that cognitive abilities are based on the amount and placement of healthy cortical tissue, and that greater amounts of cortical tissue are usually associated with superior functioning. This field was named *phrenology*. An additional important aspect of Gall’s view was that personality characteristics and abilities are determined by independent, genetically determined, neurologically distinct structures (Fodor, 1983). Gall postulated 27 faculties, including amateness (sexual behavior), acquisitiveness, reverence, verbal memory, marvelousness, love of the picturesque, defensiveness, and number.

Gall’s neuroanatomy research and “faculty” theory led to the notion of phrenology. Unfortunately, it is phrenology for which Gall is remembered best and as a result, ridiculed. His true accomplishments have been buried under the quackery of phrenology, even though it was his followers, rather than Gall himself, who were responsible for the worst sins of phrenology (Fodor, 1983). What’s more, Gall’s theories are often misrepresented or misunderstood by critics and modern historians.

Phrenology, as developed by Gall and his followers (such as Spurzheim and Combe), asserted that

(1) the mind is located in the brain; (2) mental abilities are determined by innate faculties that are located in specific parts of the brain; (3) the size of the brain devoted to a faculty indicates the strength of that faculty; (4) the shape and external characteristics of the skull at particular locations reflect the brain beneath those locations; and (5) examination of the head/skull allows a description of the individual's personality and abilities (Kurtz, 1985). These ideas supposedly were stimulated by Gall's boyhood observation that several of his classmates who were not generally more intelligent, but who were more scholastically successful because of their superior memory abilities, all had large, bulging eyes (Fancher, 1979), and were furthered by Gall's later anatomical research. Through the study of many individuals, Gall and his associates mapped the regions of the skull they believed corresponded to each of the 27 faculties. For example, Gall's boyhood observation led to the hypothesis that verbal memory ability is reflected in the region of the cortex lying immediately behind the eyes: The brain is overdeveloped at that location when ability is great, and causes the eyes to protrude. Gall's interactions with a "Passionate Widow" revealed a large, hot neck, which he interpreted as a sign that the cerebellum at the lower back of the brain was the seat of sexual behavior ("amativeness") (Fancher, 1979, p. 48).

Phrenology has been attacked on several points. First, the skull does not accurately reflect the underlying brain. Thus, even if the size of the brain at specific locations did indicate the strength of the corresponding faculty, the skull's topology would be worthless for determining this. Second, although certain abilities do seem to be localized in specific parts of the brain (e.g., speech production at Broca's area), the amount of brain tissue does not reflect the level of the ability. Also, the 27 faculties are poorly chosen and described. Many are ill-defined, and others are usually considered to be the result of the combination of several other abilities, not independent faculties. A third major problem was the rather unscientific methods of research used to "confirm" the theory. Gall and his associates reportedly cited only cases that supported the theory, while ignoring or explaining away negative results (Fancher, 1979). Gall employed the concept of "balancing actions" by one or more of the 27 faculties when the characteristics of the skull did not match the characteristics of the subject. As Fancher (1979) points out, with 27 factors involved, Gall could explain just about any result. Theories that do not allow any chance of disconfirmation are not good scientific theories.

Although most of the scientific community quickly savaged Gall and phrenology, phrenology retained great popularity among the general public. By 1832 there were 29 phrenology societies in Great Britain, and several journals devoted to phrenology were being published there and in America. Eventually, however, the interest in phrenology dissipated, and today phrenology receives attention only as a quaint example of pseudoscience. Kurtz lists three primary criteria for pseudoscience: (1) Stringent experimental methods are not routinely employed in the research; (2) There is no testable, coherent conceptual framework; and (3) Claims of confirmation are made even though questionable methods were used. By these criteria, phrenology is a pseudoscience, not merely an incorrect theory.

Fancher, R. E. (1979). *Pioneers of psychology*. New York: Norton. Pp. 43-58.

Fodor, J. A. (1983). *The modularity of mind*. Cambridge, MA: MIT Press/Bradford Books. Pp. 14-23.

Kurtz, P. (1985). Is parapsychology a science? In P. Kurtz (Ed.), *A skeptic's handbook of parapsychology*. Buffalo, NY: Prometheus Books.

Robinson, D. N. (1982). Cerebral plurality and the unity of self. *American Psychologist*, 37, 904-910.

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Lecture Launcher 1.6 – Brief Biographical Profiles of Major Contributors to Psychology

Sergeant Joe Friday famously intoned, “Just the facts, ma’am.” If you’d like to share some fast facts about some pioneers in psychology, the following snippets may be of interest to you.

Wilhelm Wundt (1832 – 1920)

Born in Neckarau, Germany, Wilhelm Wundt was the fourth child of a Lutheran minister. Despite coming from a family that boasted numerous scholars, scientists, and physicians, Wundt initially was not a good student. After he dropped out of one high school, a teacher suggested that a reasonable goal for Wundt would be a career in the postal service. Wundt’s scholastic abilities improved, however, and in 1855 he graduated at the top of his class in medical school. Wundt then went to Berlin to study physiology with Johannes Müller, and he subsequently decided to become an experimental physiologist himself. Wundt then returned to the University of Heidelberg, where he worked as an assistant for Herman von Helmholtz. It was at Heidelberg that Wundt taught his first course in psychology. The year was 1862.

In 1879, at the University of Leipzig, where he held a chair in philosophy, Wundt established the Institute for Experimental Psychology, the first laboratory whose formal purpose was the scientific investigation of the human mind. Wundt is one of the most prolific contributors to the field of psychology ever. It is estimated that between the years of 1853 and 1920, Wundt wrote 53,735 pages of text. Wundt was not only a voracious writer; he was also responsible for training numerous researchers, some of whom, such as Edward Titchener, brought versions of Wundt’s psychology to America.

Sigmund Freud (1856 – 1939)

Sigmund Freud was born in Pribor, Czechoslovakia, in 1856. Although Freud was a gifted student, it took him eight years to finish his medical degree at the University of Vienna, partly because he was interested in so many topics. Freud first pursued a career as a neurologist, but financial concerns forced him into general medical practice. In cooperation with his friend Joseph Breuer, Freud began to treat hysterical women. This is unusual, because at the time there was no known cure for hysteria, which is now known as a conversion disorder. Through trial and error and feedback from his clients, Breuer and Freud developed the technique known as psychoanalysis. Its fundamental rule is honesty; clients must relay all thoughts and feelings uncensored to the analyst. Clients then follow their stream of thought wherever it may lead, a process known as free association. In the course of free association, clients often uncover traumatic events in the past, and, upon reliving these events, often experience relief from their symptoms. Freud’s first major work, *The Interpretation of Dreams* (1900), detailed the process of dream interpretation, which he felt was the “royal road to the unconscious.” Although it took six years to sell the first 600 copies printed, this work was reprinted eight times during Freud’s lifetime. Although the technique of psychoanalysis is perhaps Freud’s most important legacy, he made many other substantial contributions to psychology. These include the recognition of the importance of sexuality and unconscious processes, a fully developed system of personality, and an appreciation for the conflict between individual desires and the constraints of society.

William James (1842 – 1910)

William James, often considered the father of American psychology, was born in New York City, but

spent much of his childhood traveling between the United States and Europe, where he attended several private schools. James' interest in such varied fields as philosophy, religion, and science were cultivated at home in an enriched environment shared with his brother Henry James, the famous author. William James struggled to find a vocation that suited his various interests, trying his hand at art, chemistry, and finally, medicine. He received his M.D. from Harvard in 1868.

In 1872, James began teaching physiology at Harvard but was preoccupied by his ongoing and deep interest in such philosophical issues as free will and determinism. Though James considered himself a temporary dabbler in the discipline of psychology, his two-volume textbook, *Principles of Psychology* (1890), stood as the field's definitive textbook through the first half of this century. It is still considered one of the best-written texts on psychology and a source of many original ideas. James' contributions to psychology include the notion of a stream of consciousness, the importance of habit and instinct, and a complex theory of the self, theory of emotion, and opening the boundaries of psychology to include topics such as religious beliefs.

B.F. Skinner (1904 - 1990)

Burrhus Frederic Skinner was born and raised in Susquehanna, Pennsylvania and received a bachelor's degree in English from Hamilton College in New York. Skinner enrolled in the experimental psychology program at Harvard and studied under E.G. Boring, earning his masters degree in 1930 and Ph.D. in 1931. In 1936, he began his academic career at the University of Minnesota; then, in 1945, he took a position as chairman of the psychology department at Indiana University. In 1948, however, Harvard offered him a position, which he accepted, and he remained there for the rest of his life. Skinner died of leukemia in 1990.

While Skinner was at Harvard, he was heavily influenced by the work of John B. Watson. From this influence, Skinner dedicated his life's work to studying the relationship between reinforcement and observable behavior. Throughout his career, he insisted that psychology be a scientific, empirically driven discipline. He is considered by many to be one of the most important figures in twentieth century psychology, and his contribution to both clinical and experimental psychology is evident in the work of psychologists who followed his lead, and to this day, extend his work in associative learning research. The principles of reinforcement that he outlined were built on by clinical psychologists and applied to the conceptualization and treatment of mental disorders. The application of behaviorism to clinical psychology was not short-lived, as empirically supported treatments for anxiety disorders (e.g., panic disorder, simple phobia) and child conduct problems are based upon behavioral principles.

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Lecture Launcher 1.7 – Wundt's Other Method: Historical and Cultural Psychology

An important, although often overlooked, aspect of Wilhelm Wundt's work is his recognition of two kinds of science, and his belief that psychology belongs to both. In German these two sciences are called *Naturwissenschaften* (naturalistic psychology) and *Geisteswissenschaften* (cultural or social psychology). As the historian of psychology, Ernest Hilgard, notes, "in German psychology, the two kinds of science depended upon their distinctive methods." Naturalistic psychology is experimental and follows the methods of physiology, whereas cultural psychology utilizes a historical method and "its substance is the data of cultural residues" (1987, p. 46). Wundt distinguished between questions that were suitable for

experimental investigation and those that had to be approached historically, but did not consider these sciences to be mutually exclusive. Rather, “he kept both streams of psychology flowing in the hope of including both in his grand system” (p. 47). Late in his life, between the years 1900 and 1920, Wundt published a 10-volume work in *Volkerpsychologie* (historical-cultural psychology) using the historical method, and included were discussions of language, myth, art, morals, social customs, and laws.

Hilgard notes that in American psychology, there is a long, although muted, history of debate between idiographic and nomothetic science. He writes that this debate “is in some respects parallel to Wundt’s distinction between problems that were suitable for experimental investigation and those which had to be approached historically” (Hilgard, 1987, p. 746). Science that seeks general laws, using quantitative and experimental methods, is described as nomothetic, whereas the idiographic approach, using the methods of history and biography, attempts to understand particular events in nature or society.

Gordon Allport is perhaps the best known spokesperson of the idiographic approach. He believed that the individual personality was unique and that a psychology of personality must necessarily be idiographic. Existential and phenomenological psychologists have also argued for the historical method. More recently, however, with the emergence of social constructionism as a growing influence in the field and the increasing recognition of the need to understand behavior within its unique historical and cultural context, Wundt’s second science seems to be gaining importance. History seems to be proving Wundt correct in his understanding that psychology must include *both* methods.

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Lecture Launcher 1.8 – Dates in the Development of Psychoanalysis

The psychodynamic perspective, in both its original and modified versions, was influential in the historical development of psychology. Share with your students some important dates from this perspective’s history.

January 7, 1908Little Hans had his first phobic attack. Eeeek! Horses!!
February 7, 1870Alfred Adler was born in Rudolfsheim, Austria.
March 30, 1896The term *psychoanalysis* was first used in a paper by Sigmund Freud.
April 20, 1950Anna Freud speaks at Clark University.
May 6, 1856Sigmund Freud was born in Freiberg, Moravia.
June 26, 1939Freud appeared on the cover of *Time* magazine
July 26, 1875Carl Jung was born in Kesswil, Switzerland.
August 21, 1909Jung and Freud departed Bremen to attend a conference at Clark University
September 16, 1885Karen Horney was born in Hamburg, Germany.
October 1, 1907 Freud began treating the “Rat Man.”
November 4, 1899*The Interpretation of Dreams* was first published.
December 11, 1880Josef Breuer began his treatment of “Anna O.”

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Lecture Launcher 1.9 – Women in the History of Psychology in America

Psychology has renewed its appreciation of diversity in human behavior. Part of that diversity includes celebrating the accomplishments and contributions of women to the field of psychology. Share with your students the stories of some key figures from psychology's history:

Mary Whiton Calkins (1863-1930) attended Harvard University and worked with William James, but because Harvard did not officially admit women into graduate programs, Calkins never received a Ph.D. from Harvard. At best, Harvard offered her the degree from its sister school Radcliffe. She refused, stating that she ought to be given the degree from the institution where she earned it. Calkins collaborated with Edmund Sanford from neighboring Clark University on a variety of research projects. At that time, women with advanced degrees or training primarily received faculty positions at female colleges, such as Wellesley and Vassar Colleges. Calkins received a position at Wellesley College in 1887, and established a prolific laboratory in 1891 producing short-term memory research (Madigan & O'Hara, 1992). In 1906, Calkins was the first woman elected President of the American Psychological Association (APA).

Margaret Floy Washburn (1871-1939) was the first person, male or female, to receive a Ph.D. from Edward B. Titchener in 1884, the leading structuralist in American experimental psychology at that time (Goodwin, 1999). She was also the first female to receive a Ph.D. in the United States. Interestingly, Washburn never believed Titchener taught her much, as she became a leading comparative psychologist at Vassar College. She produced her most influential work in *The Animal Mind* in 1908, and in 1921, she was elected the second woman president of APA. She suffered a cerebral hemorrhage in 1937, and died from its complications in 1939 (Scarborough & Furumoto, 1987).

Christine Ladd-Franklin (1847-1930) was a mathematician who developed an interest in visual perception and made great contributions to theories of color vision (Furumoto, 1992). She married a math professor from Columbia University, and she occasionally taught adjunct courses there. However, she was rarely paid. Like Calkins, she did not receive her Ph.D. although she had completed all of the required work. Johns Hopkins University finally granted her the degree shortly before her death. She accepted the degree in person.

At the turn of the 20th century, one popular belief held that there was more variability in intelligence in men than in women. One implication of this belief was that even the brightest of women would never be as bright or even “outshine” the brightest of men. African American psychologist *Leta Stetter Hollingworth* (1886-1939) challenged these beliefs with her research which showed no evidence that the distribution of intelligence test scores differed between men and women (Hollingworth, 1914). She also challenged the popular belief that women's intellectual abilities were affected by their menstrual cycles, again finding no statistical evidence to support such claims (Silverman, 1992). Hollingworth's contributions are often seen as the seedlings for the formal study of the psychology of women.

African American psychologist *Mamie Phipps Clark* (1917-1983) received her bachelor's and master's degrees from Howard University, and her Ph.D. from Columbia University in 1944. She is well-known for her studies of racial differences in racial identity and self-concept (Clark & Clark, 1950). In the 1940s and 1950s racial segregation was becoming institutionalized, and Clark became interested in the effects of segregation on African American children. She conducted a series of studies in which African American and white children were shown black and white dolls. The children were first asked to pick the doll they most looked like, establishing a measure of racial identity. Then, children were asked which doll they

would most like to play with. Both white *and* African American children preferred the white doll, suggesting for both races of children a preference and perhaps more value on being white. Clark's work was considered and noted in the Supreme Court's 1954 ruling in *Brown v. Board of Education* desegregation case, which ruled that public school segregation was unconstitutional.

Clark, K. B., & Clark, M. P. (1950). Emotional factors in racial identification and preference in Negro children. *Journal of Negro Education, 19*, 341-350.

Furumoto, L. (1992). Joining separate spheres: Christine Ladd-Franklin, woman-scientist. *American Psychologist, 47*, 175-182.

Furumoto, L., & Scarborough, E. (1992). Placing women in the history of psychology: The first American women psychologists. In J. S. Bohan (Ed.) *Seldom Seen, Rarely Heard* (pp. 337-353). Boulder, CO: Westview Press.

Goodwin, C. J. (1999). *A history of modern psychology*. New York: Wiley.

Hollingworth, L. S. (1914). Variability as related to sex differences in achievement. *American Journal of Sociology, 19*, 510-530.

Madigan, S., & O'Hara, R. (1992). Short-term memory at the turn of the century. *American Psychologist, 47*, 107-174.

Scarborough, E., & Furumoto, L. (1987). *Untold lives: The first generation of American women psychologists*. New York: Columbia University Press.

Silverman, L. K. (1992). Leta Stetter Hollingworth: Champion of the psychology of women and gifted children. *Journal of Educational Psychology, 84*, 20-27.

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Lecture Launcher 1.10 – African Americans in the History of Psychology in America

Like women, African Americans faced many obstacles to their education and participation in psychology. Most white institutions would not accept African American students, and when they were able to enroll, they often experienced discrimination. In addition, few undergraduate black colleges offered a major in psychology until after the 1940s. Howard University, the only major black university offering graduate study, awarded 32 Ph.Ds. to African Americans from 1920 to 1950. During the same period only eight African Americans earned a Ph.D. from one of the ten most prestigious white universities. Not only was earning the Ph.D. difficult, employment opportunities were scarce for African American psychologists since neither white universities nor organizations in the private sector would hire them. Most taught at black colleges where opportunities to engage in research were limited, thus restricting opportunities for professional recognition. The situation for African American students has improved dramatically in recent years. Kenneth B. Clark, best known for his research on the effects of racial segregation, became the first African American elected as APA president in 1970.

Guthrie, R. V. (1976). *Even the rat was white: A historical view of psychology*. New York: Harper and Row.

Schultz, D. P., & Schultz, S. E. (2007). *A history of modern psychology* (9th ed.). Orlando, FL: Harcourt Brace Jovanovich.

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Lecture Launcher 1.11 – Over the Edge

As the runners lined up to start the 1986 NCAA 10,000-meter championship, Kathy O. was the odds-on favorite. She had broken high school track records in three distances and recently set a new American collegiate record for the 10,000-meter race. Her parents, who were always supportive fans, watched from the sidelines. Kathy got off to a slow start but was only a few paces behind the leaders. Her fans knew she could soon catch up. However, this time Kathy did not bolt to the lead as she had done before. Instead, she veered away from the other runners. Without breaking her stride, she ran off the track, scaled a 7-foot fence, raced down a side street, and jumped off a 50-foot bridge. Ten minutes later, her coach found her on the concrete flood plain of the White River. She had two broken ribs, a punctured lung, and was paralyzed from the waist down. Not only would she never run again, she might never walk again.

What happened to Kathy? Why did she quit the race and nearly self-destruct? As a star athlete and premedical student on the Dean's list, she had everything going for her. She had been valedictorian of her high school class. Teachers and coaches described her as sweet, sensible, diligent, courteous, and religious. Nobody understood her behavior. It did not make sense. Kathy's father thought the tragedy "had something to do with the pressure that is put on young people to succeed." Teammates felt the pressure may have come from within Kathy herself. "She was a perfectionist," said one of them. Determined to excel at everything, Kathy had studied relentlessly, even during team workouts.

How did Kathy explain her actions? She told an interviewer that she was overcome by the terrifying fear of failure as she began falling behind in the race. "All of a sudden . . . I just felt like something snapped inside of me." She felt angry and persecuted. These negative reactions were new to Kathy and made her feel as if she were someone else. "I just wanted to run away," she recalled. "I don't see how I climbed that fence...I just don't feel like that person was me. I know that sounds strange, but I was just out of control... I was watching everything that was happening and I couldn't stop." (UPI, 12/22/86)

The case of Kathy O. raises fascinating questions for psychology. Personality, social, and developmental psychologists might ask how athletic ability, intelligence, parental support, competition, motivation to achieve, and personality traits combined to make Kathy a superstar in the first place. Clinical psychologists would want to know why something snapped in Kathy at this race, why feelings of anger were so foreign to her, and why she felt persecuted. Those who study the nature of consciousness would try to understand Kathy's perception that she was outside of herself, unable to stop her flight toward death. Health psychologists and those who work in the area of sports psychology might try to identify signs of stress and clues in earlier behaviors that could have signaled an impending breakdown. Psychologists who emphasize the biological basis of behavior might consider the role of brain and hormonal factors in her sudden, abnormal reaction. Are there any circumstances under which you might quit as Kathy O. did?

We may never completely understand what motivated Kathy's behavior, but psychology provides the tools—research methods, scaffolding, and theories about the causes of behavior—for exploring basic questions about who we are and why we think, feel, and act as we do. Psychologists are challenged to make sense of cases such as this one that violate ordinary conceptions about human nature. Their motivation is not only intellectual curiosity, but also a desire to discover how to help people in ways that might prevent such tragedies in the future.

Zimbardo, P. G., Johnson, R. L., Weber, A., & Gruber, C. W. (2007). *Psychology (AP High School Ed.)*. Upper Saddle River, NJ: Pearson Education.

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Lecture Launcher 1.12 – Using Animals in Psychological Research

A controversial issue in psychology, and in many other fields of study, involves the use of animals in research. Is it ethical to subject animals to unnatural and/or painful situations in the pursuit of knowledge about the human condition? You might present students with some additional information about the use of animals in psychological research and the nature of the debate.

Psychologists who study animals are sometimes interested in comparing different species or hope to learn more about a particular species. Their work generally falls into the area of basic science, but often it produces practical benefits. For example, using behavioral principles, farmers have been able to reduce crop destruction by birds and deer without resorting to their traditional method—shooting the animals. Other psychologists are primarily interested in principles that apply to both animals and people. Because many animals have biological systems or behavioral patterns similar to those of human beings, using animals often allows more control over variables than would otherwise be possible. In some cases, practical or ethical considerations prevent the use of human beings as subjects. By studying animals, we can also clarify important theoretical issues. For example, we might not attribute the greater life expectancy of women solely to “lifestyle” factors and health practices if we find that a male-female difference exists in other mammals as well.

As the text points out, those who support the use of animals in research argue that animal studies have led to many improvements in human health and well-being. In recent years, however, animal research has provoked angry disputes over the welfare of animals and even over whether to do any animal research at all. Much of the criticism has centered on the medical and commercial use of animals, but psychologists have also come under fire. Critics of animal research have pointed to studies that produce no benefits for human beings but involve substantial harm to the animals being studied. A few years ago, for instance, a Maryland psychologist studying the nervous system was convicted of cruelty to animals after he cut the nerve fibers controlling limb sensation in 17 monkeys. The purpose of his research was to find ways to restore the use of crippled limbs in stroke victims. The charges alleged abusive treatment of the animals. The psychologist’s conviction was eventually reversed on appeal, but by then the government had withdrawn its funding of the project.

People have staked out extreme positions on both sides of this debate. The controversy has often degenerated into vicious name-calling by extremists on both sides. Some animal rights activists have vandalized laboratories, and threatened and harassed researchers and their families; some scientists have unfairly branded all animal welfare activists as terrorists (Blum, 1994). A more positive result of the debate has been the close examination of the American Psychological Association’s ethical code for the humane treatment of animals and the passage of stricter federal animal welfare regulations governing the housing and care of research animals. Most psychological organizations, however, oppose proposals to ban or greatly reduce animal research. The APA and other organizations feel that protective legislation for animals is desirable but must not jeopardize productive research that increases scientific understanding and improves human welfare.

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Lecture Launcher 1.13 – Do Psychologists Have an Obligation to do No Harm?

In the years following the September 11th, 2001 attacks, the U.S. military and the CIA used controversial interrogation techniques on suspected terrorists in an attempt to gain information and prevent future attacks. These techniques—which some view as torture—included stress positions, water-boarding, and extreme sleep deprivation. Especially disturbing to some is the fact that psychologists participated in these interrogation programs. This raises the ethical question of whether psychologists have a professional obligation to “do no harm,” or whether psychologists have a higher obligation to help protect the public from future attacks. In 2005, the American Psychological Association (APA) adopted the position that psychologists could, in fact, work as interrogation consultants with national security and military agencies. Many members, however, felt that position was inconsistent with the APA principles, and more recent resolutions have banned psychologists from participating in interrogations which use specific controversial techniques like forced nudity and exploiting the phobias of prisoners.

Discuss this topic with your class and encourage students to share their opinions. Some interesting questions to stimulate the discussion are: If the interrogation techniques are shown to yield unreliable information, does that affect your decision on whether psychologists should be allowed to participate? What if interrogations are shown to yield useful information that can save lives? What if the psychologist’s primary role is to make sure the interrogation does not permanently damage the suspect? Alternatively, you may want to divide the class into groups, and then have each group develop an argument for or against allowing psychologists to participate in interrogations. Each group could then elect a spokesperson to debate the issue in front of the class.

Munsey, C. (2008). The debate continues: Psychologists continue to discuss the field’s involvement in interrogations. *Monitor on Psychology*, 39(9), 16.

Vedantam, S. (2007, August 20). APA rules on interrogation abuse: Psychologists’ group bars member participation in certain techniques. *Washington Post*. Retrieved on November 21, 2009, from <http://www.washingtonpost.com/wpdyn/content/article/2007/08/19/AR2007081901513.html>

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Lecture Launcher 1.14 – Clinical Training vs Psychiatric Training

Jean M. Kim and Edward C. Chang, of the University of Michigan, compiled rankings of U.S. and Canadian clinical psychology programs based on how well their graduates performed on the Examination for Professional Practice in Psychology (EPPP) between 1997 and 2006. The Top 10 programs are listed below:

- 1 University of Victoria
- 2 University of Waterloo
- 3 University of Illinois at Champaign-Urbana

- 4 Rutgers University, New Brunswick
- 5 Concordia University
- 6 University of Wisconsin, Madison
- 7 University of British Columbia
- 8 Marquette University
- 9 Temple University
- 10 Queens University

For historical comparison, here are the Top 10 clinical psychology programs between 1988 and 1995, as reported by the *APS Observer*:

- 1 University of Oregon
- 2 University of Waterloo
- 3 University of Pennsylvania
- 4 University of Delaware
- 5 University of California, Los Angeles
- 6 University of Iowa
- 7 University of Minnesota
- 8 University of Connecticut
- 9 Yale University
- 10 University at Albany, SUNY

Given below are the 2005 rankings of psychiatry programs, based on amount of NIH grant funding received:

- 1 University of Pittsburgh School of Medicine
- 2 University of Pennsylvania School of Medicine
- 3 Yale University School of Medicine
- 4 Duke University School of Medicine
- 5 UC San Diego School of Medicine
- 6 Washington University School of Medicine
- 7 Johns Hopkins University School of Medicine
- 8 Mount Sinai School of Medicine
- 9 University of Texas Southwestern Medical Center
- 10 University of Maryland School of Medicine

You might share these data with your students, for several purposes. First, be clear to point out that different metrics were used across these ranking systems, and that certainly other standards apply. For example, performance on the EPPP is just one marker of clinical training, just as successful grant funding is only one indication of competence in psychiatric research. Second, before your students shuffle off to Canada seeking the best in clinical training, point out that there are no Canadian institutions in the psychiatry list primarily because...well, the *United States* National Institutes of Health tend not to fund Canadian programs. In any event, you can use these data as a starting point for highlighting the differences in training, perspectives, practice, income, and other dimensions between clinical psychologists and psychiatrists. While you're pointing out the distinctions, however, be sure to highlight some similarities across the two types of training.

<http://socialpsychology.org/clinrank.htm>

http://www.residentphysician.com/Psychiatry_rankings.htm

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▼ CLASSROOM ACTIVITIES, DEMONSTRATIONS, AND EXERCISES

- 1.1 – Inference or Observation?
- 1.2 – Pseudopsychology and the Mozart Effect
- 1.3 – Find the Flaw
- 1.4 – Applying Critical Thinking Guidelines
- 1.5 – Let Me Tell You a Story
- 1.6 – Contradictory Beliefs
- 1.7 – A Jigsaw Approach to Learning the Early History of Psychology
- 1.8 – Which Famous Psychologist Am I?
- 1.9 – What Psychologists Know
- 1.10 – Thinking About Your Interests in Psychology

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Activity 1.1 – Inference or Observation?

Copy and distribute **Handout Master 1.1** to students. This review exercise asks students to decide whether each of 14 statements is strictly objective or whether it includes an inference made by the observer.

Answers:

- | | | | | |
|------------------------|-----------------------|-------------------------|-------------------------|-------------------------|
| 1. <i>observation,</i> | 2. <i>inference,</i> | 3. <i>inference,</i> | 4. <i>observation,</i> | 5. <i>inference,</i> |
| 6. <i>inference,</i> | 7. <i>inference,</i> | 8. <i>observation,</i> | 9. <i>inference,</i> | 10. <i>observation,</i> |
| 11. <i>inference,</i> | 12. <i>inference,</i> | 13. <i>observation,</i> | 14. <i>observation.</i> | |

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Activity 1.2 – Pseudopsychology and the Mozart Effect

When discussing pseudoscience and critical thinking, ask students about their impression of the so-called *Mozart effect*. Most students will have heard of the general phenomenon and have seen videos or CDs “designed to increase your children’s IQ.” (Zell Miller, the former governor of Georgia, was so impressed by this information that he authorized the development of a program to purchase thousands of classical music CDs, so that every newborn baby in Georgia could be sent home from the hospital with a head start on the Mozart effect.) Bring in a magazine advertisement and read from it, touting the merits of the product (you can find images of and information about such products with a quick Internet search). Ask students if they believe the claims, and if they would buy the product. Probe them by asking what proof they would need that the product actually works. Usually, students will begin to question the merits of the

product, at which point you can discuss the actual psychological findings of this moneymaking gimmick by summarizing the work of Steele, Bass, and Crook (1999).

Pseudoscience quite literally means “false science.” Its “claims [are] presented so that they appear scientific even though they lack the supporting evidence and plausibility” (Shermer, 1997, p. 33). Furthermore, pseudoscience appears to use scientific methods and tries to give that “science-y” impression. Some characteristics of pseudoscience include the following:

- associates itself with true science
- relies on and accepts anecdotal evidence
- sidesteps disproof: any possible outcome is explained away, and fails to make specific predictions
- dangerously reduces complexity to simplicity

Ask students why the Mozart effect would be considered pseudoscience based on these types of characteristics. Invite your students to share other examples of possible pseudoscience, such as graphology, palmistry, aromatherapy, and quite arguably Eye-Movement Desensitization and Reprocessing (EMDR). Finally, encourage them to visit sites such as www.skepticblog.org/, www.skeptic.com, or MichaelShermer.com.

Steele, K.M., & Bass, K. E., & Crook, M. D. (1999). The mystery of the Mozart effect: Failure to replicate. *Psychological Science*, *10*, 366–369.

Shermer, M. (1997). *Why people believe weird things: Pseudoscience, superstition, and other confusions of our time*. New York: W. H. Freeman & Co.

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Activity 1.3 – Find the Flaw

Use **Handout Master 1.2** as a basis for this exercise, which may be done as a whole-class or small-group exercise. Ask students to identify the error in critical thinking for each statement on the student handout. Suggested/correct answers are given below.

1. *In a research proposal, a student said that he was going to do research on “meditation and mental illness.”*
 - Suggested answer: Define your terms (2). The student’s proposal as worded is vague.
2. *I joined this group to find meaning in my life and a purpose for living. Our leader has answers that your parents and teachers could not give you. He will free your mind from the trivialities of existence and make the path of truth and virtue easy to follow.*
 - Suggested answer: Tolerate uncertainty (8). One reason why cults are attractive is that they offer easy answers to difficult questions.
3. *A number of great authors and artists have suffered from manic-depressive disorder, proving the proposition that highly intelligent people are especially susceptible to mental disorders.*
 - Suggested answer: Don’t oversimplify (6). Statement goes from “a number of great authors and

artists” to “highly intelligent people.”

4. *Child abuse and neglect have increased as more mothers have found jobs outside of the home. These problems will probably be with us until society recognizes the truth of the old saying that “a woman’s place is in the home.”*
 - Suggested answer: Consider other interpretations (7). The proposition ignores many other possible causal factors of child abuse. It also concludes the assumption that “a woman’s place is in the home” is true.
5. *I don’t understand why people are so terrified of nuclear warfare. There has been a succession of new and more deadly weapons throughout history, and humanity has survived in spite of it.*
 - Suggested answer: Examine the evidence (3).

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Activity 1.4 – Applying Critical Thinking Guidelines

Use **Handout Master 1.3** as a basis for this exercise, which asks students to apply the eight guidelines for critical thinking to everyday statements. The following list contains suggested answers for the **Applying Critical Thinking Guidelines** exercise. Note that some of these statements violate more than one of the guidelines.

1. Define the problem (2). Freud’s use of the term “repression” did not refer to repression by governments.
2. Don’t oversimplify (6). An example of either/or thinking. Because you cannot prove a negative, you must also consider other interpretations (7) for the absence of contact with other planets.
3. Consider other interpretations (7). A causal relationship between marijuana use and use of other drugs is assumed. There is no information on people who smoked marijuana who did not “move on” to more potent drugs.
4. Analyze assumptions and biases (4). Jezebel is assuming that the hospital selected the pain reliever on the basis of its effectiveness. Perhaps the hospital gets the medication free of charge or at a greatly reduced cost. Define the problem (2). Defining the problem as “pain relief” may be too broad. Perhaps the condition causing Jezebel’s pain problems calls for a different type of medication.
5. Don’t oversimplify (6). An example of either/or thinking. Maybe I’m indifferent.
6. Tolerate uncertainty (8). The student seems more interested in answers than in truth.
7. Ask questions; be willing to wonder (1). Statement shows a lack of willingness to search for causes and cures.
8. Avoid emotional reasoning (5). “Gut feelings” can be wrong.
9. Consider other interpretations (7).
10. Analyze assumptions and biases (4). The question has a built-in assumption. Is the assumption biased?

11. Examine the evidence (3). The statement expresses stereotypes for which there is little or no support.
12. Avoid emotional reasoning (5).
13. Examine the evidence (3). Perhaps the journal publishes only studies that support the existence of psychic phenomena.
14. Tolerate uncertainty (8). The statement suggests making a hasty decision to escape the discomfort of uncertainty.

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Activity 1.5 – Let Me Tell You a Story

Copy and distribute **Handout Master 1.4** to your students. This handout contains five brief stories. Ask students to apply the critical thinking guidelines to the stories. Suggested answers are printed below. For each item in this exercise, more than one critical thinking guideline is involved. The answers below are those most often given by students, but others are also possible.

1. *Avoid emotional reasoning* (#5). Amelia’s criticism of and disappointment with her dates may be due to the loneliness of being in a new city and an urgent need for emotional intimacy, more than the characteristics of the men with whom she went out.
Don’t oversimplify (#6). Amelia is generalizing about all the males of dating age in the city, and her ability to find a romantic partner, based on a sample of only three dates.
Consider other interpretations (#7). For example, Amelia’s dates may have been unsatisfactory as much because of Amelia’s personality traits and behavior as the men’s.
2. *Don’t oversimplify* (#6). The parents have jumped to the conclusion that TV alone is responsible for Benjamin’s failure to do his homework, and that the solution is to deprive him completely of TV.
Ask questions (#1) and *consider other interpretations* (#7). Other factors besides TV could be involved. His parents might ask themselves: Is Benjamin unhappy at school? Are they (the parents) providing him with enough support and encouragement? Is there some reasonable amount of TV watching between five hours and none at all, that is, is this a way to avoid either/or thinking? For example, could the parents allow an hour or two of viewing if Benjamin does all his homework?
3. *Examine the evidence* (#3). The fact that some “ancient structures and designs” remain unexplained doesn’t show that creatures from outer space have visited the earth. It’s up to Bonnie to provide evidence that such creatures exist, not up to her friend to provide evidence that they don’t. Nonexistence of anything—pink elephants, talking pigs—cannot be proven.
Consider other interpretations (#7). There are other possible explanations of those ancient structures and designs. For example, ancient civilizations may have had more sophisticated engineering and design skills than we realize.
Tolerate uncertainty (#8). The fact that science hasn’t explained a phenomenon yet doesn’t mean we should reach for fanciful and implausible explanations.
4. *Examine the evidence* (#3). Tony didn’t actually see the man strike the woman; he just saw him stooping over her.

Avoid emotional reasoning (#5). Tony is drawing his conclusions in the heat of anger and acting on the basis of gut feelings.

Consider other interpretations (#7). Perhaps the man is actually helping the woman, whose injuries could be due to an accident, a hit-and-run, or an assault by someone else.

5. *Avoid emotional reasoning* (#3). Susan is allowing her emotional response to homosexuality to determine her position on people’s legal and civic rights.

Analyze assumptions and biases (#4). Susan’s prejudiced attitudes about homosexuals are causing her to focus on a few cases of unhappy or disturbed gay people and to ignore all the cases of happy and well-adjusted gay people.

Don’t oversimplify (#6). Susan has generalized from a few gay people she has known to the entire population of gay people.

Consider other interpretations (#7). Even if some gay people are “disturbed and unhappy,” the cause could be the prejudice and discrimination they must endure rather than homosexuality per se.

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Activity 1.6 – Contradictory Beliefs

Consider these contradictory beliefs:

Birds of a feather flock together *Opposites attract*
Absence makes the heart grow fonder *Out of sight, out of mind*
You can’t teach an old dog new tricks *Never too old to learn*
The squeaky wheel gets the grease *The nail that sticks up gets hammered down*
You can’t judge a book by its cover *Where there’s smoke, there’s fire*
Better safe than sorry *Nothing ventured, nothing gained*
Two heads are better than one *Too many cooks spoil the broth*
Never look a gift horse in the mouth *Beware of Greeks bearing gifts*

Often students will have anecdotal stories about each belief. Ask students to think about their beliefs from an empirical point of view. You may want to facilitate discussion by providing students with the following questions:

Can you rely on a single person’s account to believe in a phenomenon?
How might each set of beliefs be tested empirically?
When will you “believe” in a certain phenomenon?

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Activity 1.7 – A Jigsaw Puzzle Approach to Learning the Early History of Psychology

For this activity, you will need one or more colorful children’s jigsaw puzzles, depending on class size. Each puzzle should measure approximately 9 inches by 12 inches and contain 12 to 15 pieces. There should be at least one puzzle piece per student. Thus, four puzzles would be needed for a class of 50.

Break the puzzles apart and distribute the pieces randomly throughout the class, being sure not to give adjacent puzzle pieces to adjacent students. After all students receive a piece, invite them to tell you everything they can about their piece. Ask them to consider you “an alien who has just landed from the mother ship,” someone for whom everything must be reduced to a basic level and explained in terms that cannot be reduced further. Their descriptions of the puzzle pieces should not assume prior knowledge on your part (e.g., “it has a Ninja turtle on it” would assume prior knowledge). Eventually, accept descriptions such as “it is round,” “it has color on it,” and “it has no odor” because these answers are more fundamental than the previous ones. This exercise helps students understand the difficulty of reducing anything to its most fundamental level. When they have nothing more to say, introduce the word *structuralism* as a way of knowing an object or behavior by reducing it to its most basic parts. Then, have students tell you how much they know about their piece and how much they still need to know about it. This helps students to realize the limits of structuralism.

Next, students should figure out what their piece does. Encourage them to mill about the room to find adjoining pieces. (This mingling also serves as an excellent icebreaker.) After the students see how their pieces work in conjunction with other pieces, introduce the word *functionalism* as a way of knowing an object or behavior by seeking to understand its function or purpose. In short, discuss what the piece can do and what it cannot do. Then, ask students if their knowledge of their piece is complete. Although they know what its parts are (structure) and what it does (function), is there more to know? As isolated groups of students hold their two-piece objects, they realize the limitations of this approach as well. Unless everyone continues to explore, they will not obtain larger meaning and additional knowledge.

Finally, have students continue to work with their pieces to assemble all relevant parts into a whole. Again, with multiple puzzles and random piece distribution, students must cooperate and communicate to create meaningful whole puzzles. After puzzle assembly, introduce the term *Gestalt psychology* as a way of knowing an object or behavior by creating a whole from parts, such that the whole derives its meaning only when the parts relate and work together. Ask if anyone has heard the maxim “The whole is greater than the sum of its parts” and explain its meaning in relation to what they have just learned.

Krauss, J. (1999). A jigsaw puzzle approach to learning history in introductory psychology. *Teaching of Psychology*, 26(4), 279–280.

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Activity 1.8 – Which Famous Psychologist Am I?

The purpose of this activity is to familiarize students with the names and contributions of notable psychologists. For this activity, you will need to prepare a sign for each student to wear on her or his back. As students enter the class, pin or tape a sign to their backs with the name of a psychologist discussed in the introductory chapter. Make sure that the student doesn’t see the assigned name. If you have a large class, you may need to give several people the same historical name. After discussing the

history of psychology, tell the students that they are going to have a chance to guess the name of the psychologist on their back. Allow a 10–15-minute “mingling” period in which students can move about the room interacting with each other. Students are only allowed to ask questions of others which can be answered *yes* or *no*. For example, the students might ask, “Am I a woman?” After hearing the answer, they must move on to a new student to ask their next questions, such as “Am I associated with functionalism?” or “Was I the first woman to receive a doctoral degree in psychology?”

This activity can be modified for large classes. If your room lacks space for “mingling,” or you simply have too many students to complete the activity comfortably, you may want to modify this activity by asking for several volunteers. The volunteers can stand in front of the class and take turns asking questions of the entire class until they are able to figure out their assigned name.

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Activity 1.9 – What Psychologists Know

The topic of “what psychologists do” is closely related to “what psychologists know.” Breakthroughs in knowledge both central and tangential to psychology occur daily, and there’s an easy way to find out about them. Encourage your students to subscribe to one of the many services that provide information about psychology headlines. These feeds are typically free, and although some topics may be of more or less interest to your students, all the information gets delivered quickly and efficiently.

Psychology headlines from around the world

RSS - <http://www.socialpsychology.org/headlines.rss>

Headlines Box - <http://www.socialpsychology.org/headlines.htm>

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Activity 1.10 – Thinking About Your Interests in Psychology

The textbook describes various specialty areas in the field of psychology. Ask students to think about these subfields, even looking forward in the textbook for more information. Ask students to then rank their interests in psychology’s specialty areas from 1 (most interesting) to 11 (least interesting).

Clinical psychology

Cognitive psychology

Comparative psychology

Counseling psychology

Developmental psychology

Educational and school psychology

General experimental psychology

Industrial/organizational psychology

Personality psychology

Neuroscience and physiological psychology
Quantitative psychology
Social psychology

You may want to tabulate the class's interests and compare the results to the descriptive data described in the textbook. Also, it may be of interest to keep the students' rankings, then ask them to repeat the ranking at the end of the course; return their original rankings and ask students to discuss any changes that occurred (and why) from the beginning to the end of the course.

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▼ HANDOUT MASTERS

1.1 – Inference or Observation?

1.2 – Find the Flaw

1.3 – Applying Critical Thinking Guidelines

1.4 – Let Me Tell You a Story

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Handout Master 1.1 Inference or Observation?

Decide whether each statement is objective (O) or whether it includes an inference or interpretation (I) made by the observer.

- _____ 1. Marvin coughed three times before resuming his monologue on the feats he performed on the football team when he was in high school.
- _____ 2. The noise from outside caught the rat's attention and it hesitated before deciding which alley to take in the maze.
- _____ 3. As she began to talk about her mother's death, her grief manifested itself in tears.
- _____ 4. He had his notebook open on the desk in front of him but he took no notes and during the lecture he looked at his watch 23 times.
- _____ 5. After Sandra left to go to class, he continued to sit under the tree daydreaming.
- _____ 6. Sammy indicated his preference for his father by approaching him whenever he wanted to be reassured.
- _____ 7. When the group therapy session was over, she was so anxious to get away from the others that she forgot her purse and umbrella.
- _____ 8. Sue ate her hamburger and salad rapidly, and entered the conversation at the table only once during the meal.
- _____ 9. Billy became more frightened of Prissy every time she tried to hug and kiss him.

- _____ 10. While Allison told the therapist about her affair with Ted, she looked at her feet and held the arms of the chair tightly.
- _____ 11. He knocked, then he rang the doorbell and waited for 87 seconds before he finally decided that there was no one home.
- _____ 12. Kenny was too shy to join the other children in the sand pile, but I could tell that just watching them was a pleasant experience for him.
- _____ 13. The man on the other side of the street fell after the third shot was fired by the woman standing in front of the bakery.
- _____ 14. The child looked from the stick to the bread several times before she picked up the stick and used it to bring the bread within her reach.

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Handout Master 1.2 Find the Flaw

Each of the statements below violates at least one of the guidelines for critical thinking. Identify the guideline that was violated and give a brief explanation for your choice. The eight guidelines cited in Chapter One are:

1. Ask questions; be willing to wonder.
2. Define your terms.
3. Examine the evidence.
4. Analyze assumptions and biases.
5. Avoid emotional reasoning.
6. Don't oversimplify.
7. Consider other interpretations.
8. Tolerate uncertainty.

1. In a research proposal, a student said that he was going to do research on "meditation and mental illness."

Explanation:

2. I joined this group to find meaning in my life and a purpose for living. Our leader has answers that your parents and teachers could not give you. He will free your mind from the trivialities of existence and make the path of truth and virtue easy to follow.

Explanation:

3. A number of great authors and artists have suffered from manic-depressive disorder, proving the proposition that highly intelligent people are especially susceptible to mental disorders.

Explanation:

4. Child abuse and neglect have increased as more mothers have found jobs outside of the home. These problems will probably be with us until society recognizes the truth of the old saying that “a woman’s place is in the home.”

Explanation:

5. I don’t understand why people are so terrified of nuclear warfare. There has been a succession of new and more deadly weapons throughout history, and humanity has survived in spite of it.

Explanation:

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Handout Master 1.3 Applying Critical Thinking Guidelines

The following are some guidelines for critical thinking.

1. Ask questions; be willing to wonder.
2. Define your terms.
3. Examine the evidence.
4. Analyze assumptions and biases.
5. Avoid emotional reasoning.
6. Don’t oversimplify
7. Consider other interpretations.
8. Tolerate uncertainty.

Each of the statements below violates at least one of the guidelines for critical thinking. Identify the guideline that was violated and give a brief explanation for your choice.

1. A political editorial supporting severe penalties for the production and sale of pornography pointed out that all societies are repressive to some extent, and that it was Freud who pointed out that repression is the price we pay for civilization.

Guideline violated:

Explanation:

2. Because we have never been visited by extraterrestrials, and have had no communication from outer space, we can safely assume that intelligent life exists only on our own planet.

Guideline violated:

Explanation:

3. It is pretty obvious that smoking marijuana causes people to crave more potent drugs, such as cocaine and heroin. Statistics show that almost all the people who become addicted to drugs smoked marijuana before they began using more potent drugs.
Guideline violated:
Explanation:

4. Jezebel bought a bottle of pain reliever because a TV commercial claimed that most hospitals prescribe it.
Guideline violated:
Explanation:

5. You're either for us or against us.
Guideline violated:
Explanation:

6. I get disgusted with my science classes. We study the "principle of this" and the "theory of that." Aren't there any laws? Why can't scientists make up their minds and stop acting like they don't know anything for sure?
Guideline violated:
Explanation:

7. People tend to become forgetful as they get older. This is just one of the natural consequences of aging, and it would be a waste of time to look for specific causes or ways to prevent the problem.
Guideline violated:
Explanation:

8. People of different ethnic backgrounds just can't live harmoniously in the same neighborhood. Almost everyone I've talked to thinks the same way. This is a gut feeling, and we aren't likely to be wrong.
Guideline violated:
Explanation:

9. The increase in violence by adolescent gangs in this country is just another result of the liberal thinking that has more sympathy for criminals than for their victims.
Guideline violated:
Explanation:

10. Why are the people in this class so much better looking and intelligent than people in other introductory classes?

Guideline violated:
Explanation:

11. You can tell that Alice is a lot smarter than her brother. She wears those thick glasses and has a high forehead.

Guideline violated:
Explanation:

12. A mother was trying to dissuade her son from marrying a girl he had met just three weeks before. The son's response was, "But I know she's the one; the first time I saw her I began to tremble and see spots before my eyes, and I had flutters in my chest and strange sensations in my stomach. When I'm with her, I feel like I could just take off and fly."

Guideline violated:
Explanation:

13. I looked at several issues of the *Journal of Parapsychology*, a periodical that publishes research on psychic phenomena. Every article confirmed the existence of ESP, so I don't understand why most psychologists are skeptical about it.

Guideline violated:
Explanation:

14. Let's just make up our minds and buy one or the other of the houses. I'm tired of thinking about it, and all this investigation and indecision is making me nervous.

Guideline violated:
Explanation:

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Handout Master 1.4 Let Me Tell You a Story

For each story, identify the critical thinking guideline(s) violated and explain briefly (one to two sentences) what the person in the story said, did, or thought that illustrates a lack of critical thinking.

1. Amelia has moved to a new city and, after a few weeks of settling in, has started to date. Her first three dates, with Mort, Mike, and Merv, are all disappointing. "This place has no interesting men," she tells herself glumly. "I'll never meet anyone I like."

Guideline violated:
Explanation:

2. Seven-year-old Benjamin watches five hours of TV a day. His parents decide that all that time in front of the tube is keeping Benjamin from doing his homework. They unplug Ben's TV, put it away, and tell him that from now on he doesn't get to watch any TV.
Guideline violated:
Explanation:

3. Bonnie believes creatures from outer space have been visiting Earth for thousands of years. "Look at those ancient structures and designs that scientists can't explain," she says. A friend calls her belief nonsense. "You can't prove that extraterrestrials *don't* exist," replies Bonnie indignantly.
Guideline violated:
Explanation:

4. Tony is driving along when he sees a man stooping over a bleeding woman at the side of the road. Enraged that any man would strike a helpless person, he jumps out of his car and slugs the other man, knocking him out.
Guideline violated:
Explanation:

5. Susan is opposed to a proposed law that would forbid discrimination against homosexuals in housing and employment. "Every gay person I've met is unhappy and disturbed," she says, "and I wouldn't want to have to live near one."
Guideline violated:
Explanation:

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▼ **MYPSYCHLAB MULTIMEDIA RESOURCES**

On-line Resources: MyPsychLab www.mypsychlab.com

What Is MyPsychLab? MyPsychLab is a learning and assessment tool that enables instructors to assess student performance and adapt course content. Students benefit from the ability to test themselves on key content, track their progress, and utilize an individually tailored study plan. In addition to the activities students can access in their customized study plans, instructors are provided with extra lecture notes, video clips, and activities that reflect the content areas their class is still struggling with. Instructors can bring these resources to class, or easily post on-line for students to access.

Instructors and students have been using MyPsychLab for over 10 years. To date, over 600,000 students

have used MyPsychLab. During that time, three white papers on the efficacy of MyPsychLab were published. Both the white papers and user feedback show compelling results: MyPsychLab helps students succeed and improve their test scores. One of the key ways MyPsychLab improves student outcomes is by providing continuous assessment as part of the learning process. Over the years, both instructor and student feedback have guided numerous improvements, making MyPsychLab even more flexible and effective.

Pearson is committed to helping instructors and students succeed with MyPsychLab. To that end, we offer a Psychology Faculty Advisor Program designed to provide peer-to-peer support for new users of MyPsychLab. Experienced Faculty Advisors help instructors understand how MyPsychLab can improve student performance. To learn more about the Faculty Advisor Program, please contact your local Pearson representative. In addition to the eText and complete audio files, the MyPsychLab video series, MyPsychLab offers these valuable and unique tools:

MyPsychLab assessment questions: Over 3,000 questions, distinct from the test bank, but designed to help instructors easily assign additional quizzes and tests, all that can be graded automatically and loaded into an instructor's grade book.

MyPsychLab study plan: Students have access to a **personalized study plan**, based on Bloom's Taxonomy, which arranges content from less complex thinking—like remembering and understanding—to more complex critical thinking—like applying and analyzing. This layered approach promotes better critical-thinking skills, and helps students succeed in the course and beyond.

Experiments Tool – On-line experiments help students understand scientific principles and practice through active learning – fifty new experiments, inventories, and surveys are available through MyPsychLab.

APA assessments: A unique bank of assessment items allows instructors to assess student progress against the American Psychological Association's Learning Goals and Outcomes. These assessments have been keyed to the APA's latest progressive Learning Outcomes (basic, developing, advanced).

MyPsychLab Video Resources

- The Big Picture: Asking the Tough Questions
- The Basics: Diverse Perspectives
- Thinking Like a Psychologist: Debunking Myths
- In the Real World: Speed Dating
- What's In It For Me: The Myth of Multitasking
- Thinking Like a Psychologist: Thinking Critically
- So Much to Choose From: Phil Zimbardo

Media Links

- Complete the Survey: What Do You Know About Psychology?

▼ REVEL MULTIMEDIA RESOURCES

When Your Students Are Using REVEL

Consider assigning REVEL reading to be due before students come to class. You can assign the entire chapter in just a few clicks. Throughout the chapter, quizzes and journaling opportunities help students retain the information they have read. When assigning REVEL reading, select the end-of-chapter quizzes. Then, assign the end-of-chapter quizzes to be due the day after you cover the chapter in class. To provide opportunities for students to develop better writing and critical thinking skills, in addition to end-of-chapter quizzes, consider assigning essays (autograded or instructor-graded) to be due after you cover the chapter in class. Use data from the REVEL performance dashboard to implement early intervention strategies for each student.

Fully digital and highly engaging, REVEL offers an immersive learning experience designed for the way today's students read, think, and learn. Enlivening course content with media interactives and assessments, REVEL empowers educators to increase engagement with the course, and to better connect with students: pearsonhighered.com/revel.

Section	Widget Type	Interactive REVEL Content
Introduction: What Is Psychology		
1.1 Psychology, Pseudoscience, and Popular Opinion	Video	Asking the Tough Questions 1
	Survey	What Do You Know About Psychology
	Video	Debunking Myths 1
	Section Quiz	1.1 Psychology, Pseudoscience, and Popular Opinion (15 points)
1.2 Thinking Critically and Creatively About Psychology	Video	Debunking Myths 2
	Video	Debunking Myths 3
	Tabs Accordions	Thinking Critically About Psychological Issues
	Table Drag and Drop	Reviewing Critical Thinking Guidelines
	Section Quiz	1.2 Thinking Critically and Creatively About Psychology (15 points)
1.3 Psychology's Past: From the Armchair to the Laboratory	Timeline	Psychology Timeline
	Section Quiz	1.3 Psychology's Past: From the Armchair to the Laboratory (15 points)
1.4 Psychology's Present: The Four Perspectives of Psychological Science	Video	Diverse Perspectives
	Table Drag and Drop	Major Perspectives in Psychological Science
	Section Quiz	1.4 Psychology's Present: The Four Perspectives of Psychological Science (15

		points)
1.5 What Psychologists Do	Video	Asking the Tough Questions 2
	Table Drag and Drop	Types of Psychotherapists
	Flashcards	Chapter 1 Flashcards
	Section Quiz	1.5 What Psychologists Do (15 points)
Taking Psychology With You: The Nine Secrets of Learning		
Summary: What is Psychology		
	Shared Writing	The Nine Secrets of Learning (20 points)
	Chapter Quiz	Chapter 1 Quiz: What is Psychology? (75 points)
	Writing Space	Introduction to Psychology (100 points)
	Writing Space	Psychology and the Media (100 points)

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Answers to Chapter 1 Quiz

1. B
2. A
3. D
4. A
5. B
6. B
7. C
8. A
9. D
10. A
11. D
12. A
13. C
14. D
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