

# CHAPTER 1

## AN OVERVIEW OF PSYCHOLOGY AND HEALTH

### CHAPTER OUTLINE

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#### I. What is Health?

##### A. Section Introduction

1. Common definitions of health focus on lack of:
  - a. objective signs of illness - e.g., high blood pressure
  - b. subjective symptoms of illness - e.g., pain or nausea

##### B. An Illness/Wellness Continuum

1. The concepts of health and sickness overlap
2. Antonovsky proposes an illness/wellness continuum with polar ends of death/illness/disability v. optimal wellness
  - a. need to change focus from what makes people sick to what keeps people well
3. Health = the positive state of physical, mental and social well-being that varies over time along a continuum

##### C. Illness Today and in the Past

1. In industrialized nations, people live longer than in past and suffer from different patterns of illnesses
2. Until this century, people in North America died from mainly dietary and infectious diseases
  - a. dietary illnesses: illnesses resulting from malnutrition such as beriberi (lack of vitamin B1)
  - b. infectious diseases: acute illnesses caused by harmful matter or microorganisms (bacteria or viruses); main cause of death in most of world today
3. History of diseases in US
  - a. 18<sup>th</sup> century: epidemics of smallpox, diphtheria, yellow fever, measles and influenza killed thousands, esp. children
    - i. infectious diseases such as malaria and dysentery weakened victims and made them susceptible to other fatal diseases
    - ii. such diseases were introduced to America by European settlers
      - 1) Native Americans died at high rates due to lack of previous exposure and natural immunity; lack of immunity probably due to low degree of genetic variation

- b. 19<sup>th</sup> century: new infectious disease beginning to emerge (e.g., tuberculosis)
  - i. decrease in deaths from infectious diseases by end of 19<sup>th</sup> century
  - ii. cause of decline
    - 1) improved personal hygiene
    - 2) better nutrition resulting in greater resistance to disease
    - 3) public health innovation (e.g., water purification and sewage treatment facilities)
    - 4) increased personal concern about health and following advice of health reformers
- c. 20<sup>th</sup> century: death rate due to infectious disease declined and average life expectancy increased
  - i. increase in infant life expectancy from 48 years to 77 years
  - ii. chronic disease leading cause of health problems and half of all deaths in developed countries
    - 1) definition = degenerative illnesses that develop or persist over long period of time
    - 2) examples = heart disease, cancer, stroke
    - 3) reasons = increase in industrialization increases stress and exposure to harmful chemicals; longer life span places people at higher risk for chronic disease
- 4. Main causes of death across the life span
  - a. children – accidental injury, cancer, & congenital abnormalities
  - b. adolescents – accidental injury, homicide, suicide

## **II. Viewpoints from History: Physiology, Disease Processes, and the Mind**

### **A. Early Cultures**

- 1. Belief that physical and mental illness caused by mystical forces (e.g., evil spirits)
  - a. speculative evidence - use of trephination to allow spirits to escape

### **B. Ancient Greece and Rome**

- 1. Hippocrates' humoral theory
  - a. health was due to harmony or balance of four humors whereas illness was the result of an imbalance of bodily fluids
  - b. health recommendations included good diet, avoiding excesses to keep humors in balance
- 2. Introduction of the mind/body problem
  - a. Greek philosophers, including Plato, argued that the mind and body are separate entities (mind has little impact on the body and its state of health)

3. Influence of Galen
  - a. believed in humoral theory and mind-body split
  - b. innovations attributed to Galen - animal dissections to discover how systems work, localization of illness, and belief that different disease have different effects

#### C. The Middle Ages

1. With collapse of Roman Empire, advancement of knowledge and culture slowed dramatically
2. Impact of the Church on slowing development of medical knowledge
  - a. prohibition on human and animal dissection
  - b. belief that creatures with a soul were set apart from ordinary laws of the universe
3. Illness was believed to be a punishment for sin
  - a. medical treatments involving use of torture to drive evil spirits out of body were done by clergy under this belief
4. Influence of St. Thomas Aquinas
  - a. church scholar who saw the mind and body as interrelated unit that forms whole person

#### D. The Renaissance and After

1. Period witnessed rebirth of inquiry, culture, politics, belief in "human-centered" focus; set stage for changes in philosophy once scientific revolution began
2. Influence of Descartes
  - a. advanced notion of "body as machine" and described mechanics of body action and sensation
  - b. believed the mind and body, although separate entities, communicated through pineal gland
  - c. argued soul left humans at death; therefore dissection on humans acceptable
3. Changes in science & medicine
  - a. knowledge increased due to technological improvements (e.g., microscope) and use of dissection
  - b. rejection of humoral theory and development of new theories due to increased knowledge of body functions and discovery of microorganisms
  - c. surgical practice improved by antiseptics & anesthesia
  - d. status of hospital changed to "place of healing" along with more respect for ability of doctors to heal
4. Biomedical model
  - a. new approach to conceptualizing health/illness that proposes physiological problems cause afflictions of the body
  - b. health/illness of body separated from psychological/social experience of the mind
  - c. dominant perspective in medicine since 19<sup>th</sup> century

### **III. Seeing a Need: Psychology's Role in Health**

#### **A. Section Introduction**

1. Biomedical model led to:
  - a. development of vaccines and reduction in infectious disease
  - b. development of antibiotics and cures to illnesses from bacterial infection
2. Despite advances, biomedical model needs improvement

#### **B. Problems in the Health Care System**

1. Health care costs comprise an increasing percentage of the GDP
2. Chronic diseases are now the main health problems
  - a. improvements in treatments have been modest
3. People have changed
  - a. higher levels of knowledge, more motivation, better able to afford medical care
  - b. "*the person*" still left out of biomedical model

#### **C. "The Person" in Health and Illness**

1. Section introduction
  - a. individual differences in tendency toward illness due to:
    - i. biomedical sources such as physiological processes or exposure to microorganisms
    - ii. psychological and social factors
2. Lifestyle and illness
  - a. lifestyle modifications (changes in everyday patterns of behavior) may affect characteristics associated with health problems
  - b. risk factors = biological or behavioral characteristics/conditions associated with development of a disease or injury
    - i. biological risk factor example: inherited genes
    - ii. behavioral risk factor examples: smoking, eating high saturated fat diet
    - iii. having more risk factors are associated with (but don't necessarily cause) higher likelihood of developing disease
  - c. behavioral risk factors associated with five leading causes of death:
    - i. heart disease = smoking, high dietary cholesterol, obesity, lack of exercise
    - ii. cancer = smoking, high alcohol use, diet
    - iii. stroke = smoking, high dietary cholesterol, lack of exercise
    - iv. Chronic Obstructive Pulmonary Disease (COPD) = smoking
    - v. accidents = alcohol/drug use, not using seat belts
  - d. lifestyle contributes to health problems and high medical costs
    - i. society bears burden of medical costs through public and private insurance programs

- e. influence of lifestyle factors on health
  - i. seven lifestyle practices related to current and future health
    - 1) practicing all seven practices resulted in health similar to younger persons
    - 2) incidence of death decreased as number of health practices increased, esp. for older persons
- f. why people persist in unhealthy behaviors
  - i. immediate pleasures of less healthful behavior
  - ii. remote negative consequences
  - iii. social pressures to engage in unhealthy practice
  - iv. strong habit of behavior (e.g., addiction or dependency)
  - v. lack of awareness of dangers associated with health behaviors or how to change behavior
- 3. Personality and illness
  - a. personality = person's cognitive, affective, or behavioral tendencies that are fairly stable across time/situation
  - b. evidence linking personality traits to health
    - i. low levels of conscientiousness and poor mental health linked to heart disease
    - ii. anxiety, depression, anger/hostility or pessimism linked to variety of diseases, esp. heart disease
    - iii. negative emotions linked to reaction to stress
      - 1) positive emotions (e.g., optimism, hopefulness) linked to lower illness rates, quicker recovery when ill
  - c. illness may affect personality and emotional states
    - i. reaction to serious illness/disability may be anxiety, depression, anger and hopelessness
    - ii. overcoming negative thoughts/feelings may increase recovery

#### D. How the Role of Psychology Emerged

- 1. Section introduction
  - a. ancient Greeks connected medicine and psychology
  - b. Freud felt physical symptoms could be an expression of unconscious conflicts
    - i. evidence - conversion hysteria
  - c. need for explanation led to development of field of psychosomatic medicine
- 2. Psychosomatic medicine
  - a. field, formed in 1930s, concerned with the interrelationships among the psychological and social factors, the biological and physiological functions of illness, and the development & course of illness
  - b. theoretical foundation is psychoanalytic with a focus on psychoanalytic interpretation of specific, real health problems

3. Behavioral medicine and health psychology
  - a. fields emerged in 1970s to study role of psychology in illness
  - b. behavioral medicine: an interdisciplinary field involving psychology, sociology, medicine & others
    - i. theoretical foundations in classical and operant conditioning
    - ii. evidence that psychological events influence bodily functions and that people can learn to control physiological systems supported the link between mind and body
      - 1) conditioning methods important in therapeutic approaches (e.g., biofeedback) used to modify behaviors and emotions
  - c. health psychology: recently developed sub-discipline in psychology also emphasizing behaviorism
    - i. primary goals of health psychology
      - 1) promote and maintain health by studying factors involved unhealthy behaviors
      - 2) prevent illness by reducing risk factors, and to treat those with illnesses
      - 3) identify the causes and diagnostic correlates of health, illness, and related dysfunction
      - 4) analyze and improve health care systems and health policy
4. An integration
  - a. general similarity: all have similar goals, study similar topics, & share same knowledge; shared belief that health & illness results from biological, psychological and social forces
  - b. how they differ: separate organizations; varying emphasis on specific topics/viewpoints
    - i. psychosomatic medicine – continued close ties to medicine and application of psychiatry
    - ii. behavioral medicine – focus on interventions that do not use drugs or surgery
    - iii. health psychology – relies on information from other subdisciplines in psychology to identify/alter lifestyle and emotional processes related to illness

#### E. Health Psychology: The Profession

1. Work locations and primary activities
  - a. clinics and hospitals – providing direct help to patients
  - b. academic departments – indirect help through research, teaching and consulting
2. Nature of clinic/hospital work
  - a. promoting emotional & social adjustment to illness or disability
  - b. helping patients manage health problems by teaching psychological methods of intervention (e.g., controlling pain)

3. Research and teaching
  - a. providing information from research about lifestyle & personality factors that contribute to health and illness
  - b. designing interventions to promote health
  - c. educating medical personnel about psychosocial needs of patients
4. Educational/training requirements
  - a. doctoral degree in psychology
  - b. clinical health psychology = APA accredited specialty
  - c. state licensing & board certification available

#### **IV. Current Perspectives on Health and Illness**

##### **A. Section Introduction**

1. The biopsychosocial model expands on the biomedical model and involves the interplay of biological, psychological, and social aspects of a person's life
2. Model assumes 3 factors affect and are affected by health/illness.

##### **B. The Biopsychosocial Perspective**

1. The role of biological factors
  - a. involves the study of inherited genetic materials and processes as well as physiologic functioning including structural defects and immunological activity
  - b. healthful functioning of body depends on how component physical systems in body operate and interact with each other
2. The role of psychological factors
  - a. role of lifestyle and personality involves describing behavior and mental processes – the focus of psychology
    - i. cognition - mental activities of perception, thought, belief systems, decision-making influence health/illness experience
    - ii. emotions - positive & negative emotional states influence and are influenced by health/illness
      - 1) influence decisions to seek treatment
    - iii. motivation - defined as why people do what they do
      - 1) part of explanation for adaptive and maladaptive health behaviors, participation in health intervention programs
3. The role of social factors
  - a. peer pressure related to adolescents engaging in smoking and drinking
  - b. society establishes health values resulting in both positive and negative behaviors (e.g., mass media promotions)
  - c. community values and community's environmental characteristics influence extent to which its members engage in health-related behaviors
  - d. family - socialization provides strong influence on the health-related behaviors, attitudes, and beliefs of its members

4. The concept of “systems”
  - a. addressing the “whole person” acknowledges that people and reasons for their behavior are complex
  - b. a holistic approach considers all aspects of a person’s life as a total entity and is consistent with the biopsychosocial approach
  - c. system = a dynamic entity of continuously interrelated components with smaller components nested within larger components (i.e., levels)
    - i. events in one system influences events in other systems

### C. Life-Span and Gender Perspective

1. Life-span perspective - an approach in which a person is considered in the context of their prior development, current development, and likely future development
  - a. illnesses experienced vary with age
  - b. pediatrics and geriatrics = branches of medicine dedicated to health/illness of children and elderly
  - c. biopsychosocial systems change as we age
    - i. biological - e.g., physiological growth & decline
    - ii. psychological - e.g., cognitive changes influence knowledge, ability to think, accepting responsibility for change, understanding implications of illness & rationale for changing health-related behaviors
    - iii. social - e.g., shift in health care-giving responsibilities from care-givers to self ; influences of peers or important others on behavior
2. Gender perspective – an approach that looks at how males and females differ in terms of biological functioning, health-related behaviors, social relationships, and risk for specific illnesses.

## **V. Relating Health Psychology to Other Science Fields**

### A. Related Fields

1. Epidemiology - scientific study of the distribution and frequency of disease and injury
  - a. investigate occurrence of illness and attempt to determine why it was distributed among the people it affected
  - b. epidemiological terminology used to describe findings
    - i. mortality - number of deaths, usually on a large scale
    - ii. morbidity - any illness, injury, or disability
    - iii. prevalence - the number of cases including both continuing and new cases at a given time
    - iv. incidence - the number of new cases of illness, infection, or disability in a period of time
    - v. epidemic - the rapid increase in incidence
  - c. use of term “rate” adds relativity to meaning (e.g., mortality rate = number of deaths per number of people in a given population during specified period of time)



2. Public health - field concerned with protecting, maintaining and improving health in the community through organized effort.
  - a. engaged in conducting research and establishing programs to promote and provide health-related services
  - b. studies health/illness in context of the community as a social system
3. Sociology - evaluates the impact of social factors on groups or communities of people.
  - a. medical sociology is concerned with social factors involved with distribution of illness, social reactions to illness, socioeconomic factors of health care use, ways in which hospital services/medical practices are organized
4. Anthropology - the study of cultures
  - a. medical anthropology - study of cross-cultural differences in health, illness and health care.
5. Impact of other disciplines on health psychology
  - a. the perspectives from other fields provide a broad perspective on health/illness and are incorporated into the discipline for explaining influences on health and illness

#### B. Health and Psychology Across Cultures

1. Health and illness vary across history since, over time, lifestyles in cultures change
2. Sociocultural differences in health
  - a. "sociocultural" refers to social and cultural factors, such as ethnic and income variations within and across nations
  - b. sociocultural differences have been observed in illness patterns, diets, and health-related beliefs and values
3. Sociocultural differences in health beliefs and behavior
  - a. ideas about cause of illness vary across time and culture
    - i. affects beliefs about appropriate treatment approaches
    - ii. example: beliefs about balance of yin and yang and the use of acupuncture to correct their balance
  - b. religious beliefs affect health practices
    - i. example: Jehovah's Witnesses reject use of blood; Christian Scientists reject use of medicine entirely; Seventh Day Adventists view body as "temple" and urge followers to take care of their bodies

## **VII. Research Methods**

### A. Section Introduction

1. Theory = tentative explanation of why and under what circumstances certain phenomena occur
  - a. characteristics of a "useful" theory
    - i. clearly stated
    - ii. brings together or organizes known facts
    - iii. relates information that previously seemed unrelated
    - iv. enables us to make predictions

- b. role of theory
    - i. guides research by providing a "roadmap" of relationships to study
- 2. Variables - characteristics of people, events, or objects that may change
  - a. independent variable - the variable manipulated directly and independently of variables not in the study
  - b. dependent variable - some outcome that is measured and is dependent on the effects of the manipulated independent variable

## B. Experiments

1. Experiment: a controlled study in which the researcher manipulates a variable to study its effects on another variable
2. The experimental method: a hypothetical example
  - a. a prediction or hypothesis of a theory is developed and tested
  - b. participants are assigned randomly to groups in order to distribute characteristics equally across the groups
  - c. experimental group receives the treatment or procedure being tested
  - d. control group does not receive the treatment or procedure being tested
  - e. placebo, an inert substance, may be given to a third group to test for the effects of expectations
  - f. double-blind approach, where neither subject nor experimenter know assignment to condition, may be used to control for experimenter demand
3. Criteria for cause-effect conclusion
  - a. levels of independent and dependent variables corresponded or varied together
  - b. cause preceded the effect
  - c. other plausible causes ruled out
4. Comparing experimental and nonexperimental methods
  - a. determining causation
    - i. in experiments, causation may be tested because an IV is manipulated
    - ii. in nonexperimental methods, causation may not be tested because an IV is not manipulated
  - b. nonexperimental methods are useful when it is not possible, feasible, or ethical to manipulate a variable of interest, or when an association between variables is to be demonstrated

## C. Correlational Studies

1. When aim of research requires only that association between variables be shown, correlational research used
  - a. example: research on risk factors

2. "Correlation" refers to the joint relation that exists between variables.
  - a. correlation coefficient can range from +1.00 to -1.00
    - i. absolute value of coefficient indicates strength of the association
  - b. positive correlation indicates that high scores on one variable are associated with high scores on another
  - c. negative correlation indicates that high scores on one variable tend to be associated with low scores on the other variable
  - d. because one can't manipulate the variables of interest, causal statement can't be made
3. Correlational studies are useful for
  - a. examining existing relationships and variables that cannot be manipulated
  - b. developing hypotheses
  - c. generating predictive information

#### D. Quasi-Experimental Studies

1. Quasi-experimental studies are similar to experiments except
  - a. variables that define the group are not manipulated (e.g., gender)
  - b. participants cannot be randomly assigned to the groups
  - c. conclusions from quasi-experimental studies are correlational and not causal
2. Retrospective and prospective approaches
  - a. retrospective – look back at past history of people who have developed a particular illness is compared to that of members of a control group
    - i. purpose - to find commonalities in people's histories that may suggest why they developed a disease
    - ii. shortcoming – faulty memory may contribute to inaccurate reports
  - b. prospective – look forward in lives of individuals to determine if differences in variable at one point in time are related to differences in another variable at a later time
    - i. more plausible causal connection
    - ii. is potentially costly and time-consuming approach
  - c. approaches developed by epidemiologists and used to identify risk factors for specific illnesses
3. Developmental approaches
  - a. approaches designed to study differences between people of different ages or of the same people across time
    - i. cross-sectional approach - individuals at different ages are observed at about the same time
    - ii. longitudinal approach - the repeated observation of the same individuals over time
      - 1) like prospective approach, potentially costly and time-consuming
      - 2) subject to loss of participants over time

- 3) valuable approach to examine change and stability in lives of participants
  - b. cohort effect - generational effect due to historical experiences of a group of subjects
- 4. Single-subject approaches
  - a. case study - in-depth examination of an individual from a person's history, interviews, and current observation
    - i. useful for describing development and treatment of an unusual problem
  - b. single-subject design – a single participant study
    - i. initial assessment is made before and after some intervention is made
    - ii. useful in determining effectiveness of new treatment method
  - c. disadvantages of single-subject approaches
    - i. low generalizability
  - d. advantages
    - i. stimulates development of new treatments
    - ii. suggests new topics for research

## E. Genetics Research

- 1. Genetic materials and transmission
  - a. chromosomes – threadlike structures that contain genes
  - b. genes – contain discrete particles of DNA
    - i. genetic information is transmitted from parent to child
    - ii. dominant genes – single gene of a gene pair that contributes to the presence of a trait
    - iii. recessive genes – when two identical genes in a gene pair contribute to the presence of a trait
  - c. DNA – basic substance of all genetic material that determines growth pattern and physical structures.
- 2. Twin and adoption studies
  - a. types of twins
    - i. monozygotic (MZ) twins – twins conceived together who have identical genetic material
    - ii. dizygotic (DZ) twins – twins conceived separately and have no more genetically similar than singly born siblings
  - b. twin studies – research on hereditary factors that focuses on differences in MZ twins compared to differences in DZ twins
    - i. since MZ twins share same genetic material, differences between them are assumed due to environmental factors
    - ii. differences observed in DZ twins assumed to be due to both genetic and environmental factors
    - iii. if assume MZ and same-sexed DZ twins have equal environmental experience, can measure genetic influence by subtracting differences from MZ pair from differences from DZ pair

- c. adoption studies – research in compare traits of adopted children with those of both natural and adoptive parents
  - i. if children are more similar to their natural parents than to adoptive, assume this is due to genetic influence
- d. conclusions observed from twin and adoption studies
  - i. heredity affects physical characteristics & physiological functioning
  - ii. genetic disorders affect levels of cholesterol & thus heart disease
  - iii. heredity has greatest impact early in life; lifestyle & habits affects health in later life
  - iv. environmental factors play a greater role than genetics in cancer development
- 3. Linking specific genes and diseases
  - a. examples of genes related to disease
    - i. sickle-cell anemia – sickle-shaped red blood cells due to presence of recessive gene in some African Americans
    - ii. phenylketonuria – inherited disease in which baby's body fails to produce enzyme necessary for metabolizing the toxic amino acid phenylalanine
    - iii. oncogenes – genes related to development of cancer
- 4. Epigenetic Effects
  - a. epigenetics – process in which chemical structures within or around DNA govern how, when, and how much a gene acts
    - i. can be passed on to offspring
    - ii. environmental events can change epigenetic process
    - iii. epigenetic changes can influence response to stress, ability to learn and remember, and development of health problems

#### F. Deciding which method is best

- 1. Each method has disadvantages and advantages
  - a. experiments: can uncover cause-effect relationships but done in artificial conditions (not like real-world settings)
    - i. ecological momentary assessment - a procedural method, using pagers to cue and collect data from individuals periodically during the day, that might help correct artificiality problem
- 2. Combining experimental and nonexperimental methods in same study may be possible and desirable
  - a. example: does reading information on health effects of excessive cholesterol induce people to change their diets
    - i. experimental manipulation = reading cholesterol information in experimental group v. reading other literature in control group
    - ii. quasi-experimental measure = age of participants

## DISCUSSION TOPICS

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### 1. Cultural Differences in Defining Health

The introductory topic in Chapter 1 centers on developing a definition for health. Sarafino places common beliefs in the absence of illness as indicators of health in contrast with Antonovsky's illness/wellness continuum. David Matsumoto (2000) expands on these themes to the extent that he sees them as being embedded in a cultural context. For example, Matsumoto notes that the medical model, the traditionally popular view of illness in the US, focuses on disease that results from some "specific, identifiable cause originating inside the body" and treatment of disease then requires eliminating the pathogens that "exist within a person's body." Health is therefore the lack of disease within the body. Matsumoto goes on to describe definitions of health as they occur in other cultures. In Asian cultures, he suggests, health is defined as the "balance between self and nature and across the individual's various roles in life." The synergy between nature, self, and others can result in a positive state called health. Matsumoto connects this vision with current definitional debates occurring in the US and ties it to the emergence of biobehavioral medicine and health psychology.

As part of a discussion session, have students consider the theme of "residing within the body". How have we seen similar explanations in mental health? How is it more generally linked to causal explanations that are common in our culture?

#### Source:

Matsumoto, D. (2000). Culture and psychology: People around the world. (2<sup>nd</sup> ed.). (pg. 230). Stamford, CT: Wadsworth.

### 2. Sex and Gender Bias in Animal and Human Research.

Since Chapter 1 introduces research methodologies to the student, this would seem to be an appropriate section to discuss the claims of sex and gender bias in clinical research using animal and human participants. Reviews on the topic by Rodin and Ickovics (1990) and Sechzer and colleagues (1994) might serve as the basis for the presentation. While they both highlight the efforts to change requirements for participant inclusion in human research, Sechzer and her colleagues note particular problems in animal research with respect to the under-representation of female animal subjects in studies, lack of information regarding the sex/gender of participants in studies, and overgeneralization of findings drawn from male samples to females. Standards for reporting of findings are presented.

#### Sources:

Rodin, J., & Ickovics, J.R. (1990). Women's health: Review and research agenda as we approach the 21<sup>st</sup> century. American Psychologist, 45(9), 1018-1034.

Sechzer, J.A., Rabinowitz, V.C., Denmark, F.L., McGinn, M.F., Weeks, B.M., and Wilkens, C.L. (1994). Sex and gender bias in animal research and in clinical studies of cancer, cardiovascular disease and depression. In J.A. Sechzer, A. Griffin, and S. Pfafflin (Eds.), Forging a women's health research agenda: Policy issues for the 1990s. New York: New York Academy of Sciences.

### **3. Introducing Alternative and Complementary Medicines.**

With the growing use of alternative and complementary medicines by health consumers, some discussion of the types of careers available in these fields may expand the discussion introduced by Sarafino in this chapter. One source of information is Dianne Lyons' book on careers in alternative medicine in which she provides an overview of various fields of alternative medicines and profiles schools providing training in these various specialties. She also provides information regarding accreditation, licensure and certification, and professional associations specific to alternative medicine specialties.

Source:

Lyons, D.J.B. (1997). Planning your career in alternative medicine: A guide to degree and certificate programs in alternative health care. Garden City Park, NY: Avery.

### **4. Cultural Differences in Health Care and Medical Delivery Systems.**

The "social" in the biopsychosocial perspective also includes institutionalized forms of health care delivery. Matsumoto contends that health care delivery systems are products of many factors including the country's level of social and economic development, the nature of technological advances and their availability to people, the level of urbanization and industrialization within the country, governmental structure, international trade laws and practices, and demands for privatization and public expenditures. He describes the United States as "an example of a country with a relatively high economic level that uses an entrepreneurial system of health care, characterized by a substantial private industry covering individuals as well as groups." He goes on to attest that "it makes sense that an entrepreneurial system is used in the United States, for example, because of the highly individualistic nature of the American culture." This observation makes for an interesting starting point in a discussion with students regarding the influence that culture has with their health and illness experiences.

Source:

Matsumoto, D. (2000). Culture and psychology: People around the world. (2<sup>nd</sup> ed.). (pp. 246-247). Stamford, CT: Wadsworth.

### **5. Stem Cell Research Debate.**

The public and scientific debate regarding the use of stem cell derived human embryos highlights the ethical problems in the genetic chase to find solutions for diseases such as diabetes, Parkinson's disease, and spinal cord injuries. An article in Newsweek magazine (2004) can be used as a starting point for the discussion of genetic processes in health. The political, scientific, and social aspects of the debate are highlighted.

Source:

Kalb, C., Rosenberg, D., & Ulick, J. (2004). Stem cell division, Newsweek, 144(17) 42-48.

More information for this discussion can be found by going to:

<http://stemcells.nih.gov/info/ethics.asp> - stem cell information from NIH

<http://www.time.com/time/2001/stemcells/> - Time magazine series on stem cell research

## ACTIVITY SUGGESTIONS

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1. **Assess Yourself: What's Your Lifestyle Like?** Have students complete Handout #1: What's Your Lifestyle Like? Discuss whether there are points of ambiguity or potential weaknesses in these questions.
2. **Health Risk Appraisal.** A generous number of health risk appraisals can now be completed on-line. HRAs can be easily found by entering the key phrase "Health Risk Appraisal" on most major search engines. Have students complete one and then compare its format to the Assess Yourself exercise above. To extend this exercise, have students pick one or two identified risk areas and develop a plan to improve their functioning on those areas.
3. **Journal Comparison.** Obtain copies of Psychosomatic Medicine, Journal of Behavioral Medicine, and Health Psychology. Compare and contrast the types of problems studied and the approaches taken. Have the students find at least one example of an experiment, a quasi-experimental study, a retrospective study, a prospective study, and a case study. In particular, have students report on the gender/sex bias argument presented in Discussion item 2.
4. **Health Psychology and Health Care Professions.** Students may be interested in finding out more information about Health Psychology and the other health care professions described in the chapter. Have students go to the Division 38 - Health Psychology webpage (<http://www.health-psych.org/>) and explore the educational and training programs for becoming a health psychologist. Another resource that students may consult is the book Career Paths in Psychology: Where your degree can take you by R.J. Sternberg (2006, American Psychological Association). The following chapter provides an overview of the work done by clinical psychologists employed in hospital settings: Daly, B.P., & Brown, R.T. Clinical psychologists in hospitals, pp. 179-200. For other health care professions, the book Career Opportunities in Healthcare by S. Field (2002, New York: Facts on File), has salary, skill requirement, and advancement opportunity information on 70 careers in health including art therapy, athletic training, dance therapy, music therapy, occupational therapy, prosthetics, physical therapy, rehabilitation counseling, social work, speech pathology and audiology, and therapeutic recreation specialist. Students might find information regarding education and training programs for specific areas of interest on-line using sites such as:



[www.bls.gov/oco/oco1002.htm](http://www.bls.gov/oco/oco1002.htm) - U.S. Department of Labor – Bureau of Labor Statistics, Occupational Outlook Handbook of Professional and related occupations

5. **The Evolution of Health Psychology as a Field**. Have students read each of the four articles below that demonstrate the changing views within the field of health psychology. Starting with the earliest article by Matarazzo in 1980 introducing the field and the concept of the biopsychosocial model of medicine, each article is an example of how the field has grown in scope and ambition. After students have read each article, discuss in class the implications of each article in terms of what is emphasized and the influence each may have had on the field. An alternative may be to have the students read different articles and discuss as a class what stood out about the article they read.

Johnson, N.G. (2003). Psychology and health: Research, practice, and policy. American Psychologist, 58(8), 670-677.

Matarazzo, J.D. (1980). Behavioral health and behavioral medicine: Frontiers for a new health psychology. American Psychologist, 35(9), 807-817.

Taylor, S.E. (1990). Health psychology: The science and the field. American Psychologist, 45(1), 40-50.

Taylor, S.E. (1987). The progress and prospects of health psychology: Tasks of a maturing discipline. Health Psychology, 6(1), 73-87.

## **Assess Yourself: What's Your Lifestyle Like?**

This survey assesses seven aspects of your usual lifestyle. For each of the listed practices, put a check mark in the preceding space if it describes your usual situation.

- \_\_\_\_\_ I sleep 7 or 8 hours a day.
- \_\_\_\_\_ I eat breakfast almost every day.
- \_\_\_\_\_ I rarely eat between meals.
- \_\_\_\_\_ I am at or near the appropriate weight.
- \_\_\_\_\_ I never smoke cigarettes.
- \_\_\_\_\_ I drink alcohol rarely or moderately.
- \_\_\_\_\_ I regularly get vigorous physical activity.

\_\_\_\_\_ Total number of check marks.

## RESOURCES

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### **Suggested Readings:**

#### ***Culture, gender, age and health***

- Aboud, F.E. (1998). Health psychology in global perspective. Thousand Oaks: Sage.
- Alexander, L. L. (2007). New dimensions in women's health. Sudbury, MA: Jones and Bartlett.
- Ammer, C. (2005). The encyclopedia of women's health. New York: Facts on File.
- Helman, C. (2007). Culture, health, and illness. New York: Oxford University Press.
- Jacobsen, K.H. (2008). Introduction to global health. Sudbury, MA: Jones and Bartlett.
- Loue, S. (1999). Gender, ethnicity, and health research. New York: Kluwer Academic/Plenum Publ.
- Loustaunau, M.O., & Sobo, E.J. (1997). The cultural context of health, illness, and medicine. Westport, CN: Bergin & Garvey.
- MacLachlan, M. (2001). Cultivating health: Cultural perspectives on promoting health. New York, NY: John Wiley & Sons Ltd.
- Marmot, M., & Wilkinson, R.G. (2006). Social determinants of health. Oxford: Oxford University Press.
- Maxwell, J., Belser, J., & David, D. (2007). A health handbook for women with disabilities. Berkeley, CA: Hesperian.
- Meyer, I. & Northridge, M.E. (2007). The health of sexual minorities: Public health perspectives on lesbian, gay, bisexual and transgender populations. New York/London: Springer.
- National Institutes of Health (2006). Women of color health data book: adolescents to seniors. Bethesda, MD: Office of Research on Women's Health.
- Niven, C.A. & Carroll, D. (1993). The health psychology of women. Chur, Switzerland: Harwood Academic.
- Seear, M. (2007). An introduction to international health. Toronto: Canadian Scholars' Press.
- Shankle, M. (2007). The handbook of lesbian, gay, bisexual, and transgender public health. Binghamton, NY: Haworth Press.
- Sheikh, A. & Sheikh, K. (1989). Eastern and western approaches to healing: ancient wisdom and modern knowledge. New York: Wiley.
- US Dept. of Health and Human Services (2005). The health and well-being of children in rural areas: a portrait of the nation, 2005. Rockville, MD: US Dept. of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau.

#### ***Psychology's role in health***

- Adler, N., & Matthews, K. (1994). Health psychology: Why do some people get sick and some stay well? In L.W. Porter & M.R. Rosenzweig (Eds.). Annual Review of Psychology. (Vol. 45, pp. 229-259). Palo Alto, CA: Annual Reviews.
- Boll, T.J., Frank, R.G., Baum, A. et al. (2004) Handbook of clinical health psychology: Volume 3. Models and perspectives in health psychology. Washington D.C.: American Psychological Association.

- Boyer, B.A. & Paharia, M. I. (2008). Comprehensive handbook of clinical health psychology. Hoboken, NJ: Wiley & Sons.
- Freidman, H.S. & Silver, R. (2007). Foundations of health psychology. New York: Oxford University Press.
- Johnson, N.G. (2003). Psychology and health: Research, practice, and policy. American Psychologist, 58(8), 670-677.
- Karoly, P. (1985). Measurement strategies in health psychology. New York: Wiley.
- Luecken, L.J. & Gallo, L.C. (2008). Handbook of physiological research methods in health psychology. Los Angeles: Sage Publ.
- Smith, T.W., Orleans, T.C., & Jenkins, D.C. (2004) Prevention and health promotion: Decades of progress, new challenges, and an emerging agenda. Health Psychology, 23(2) 126-131.
- Suls, J. & Wallston, K.A. (2003). Social psychological foundations of health and illness. Malden, MA: Blackwell Publishers
- Taylor, S.E. (1990). Health psychology: The science and the field. American Psychologist, 45, 40-50.

### ***Current perspectives on health and illness***

- Cook, A.R. (1999). Alternative medicine sourcebook: Basic consumer health information. Detroit, MI: Omnigraphics.
- Fontanarosa, P.B. (Ed.) (2000). Alternative medicine: An objective assessment. Chicago, IL: American Medical Association.
- Gesler, W.M. (1991). The cultural geography of health care. Pittsburgh, PA: University of Pittsburgh Press.
- Gordon, J.S. (1996). Manifesto for a new medicine: Your guide to healing partnerships and the wise use of alternative therapies. Reading, MA: Addison-Wesley.
- Hafferty, F.W., & McKinlay, J.B. (1993). The changing medical profession: An international perspective. New York: Oxford University Press.
- Haugen, D. (2008). Alternative medicine. Detroit: Greenhaven Press.
- Jonas, W.B. & Levin, J.S. (Eds.) (1999). Essentials of complementary and alternative medicine. Philadelphia: Williams & Wilkins.
- Kutner, M. et al (2006). The health literacy of America's adults: Results from the 2003 National Assessment of Adult Literacy. Washington, D.C.: U.S. Dept. of Education, National Center for Education Statistics.
- Lyons, D. (1997). Planning your career in alternative medicine. Garden City Park, NY: Avery.
- Mijares, S.G. (2003). Modern psychology and ancient wisdom: Psychological healing practices from the world's religious traditions. New York: Haworth Press Inc.
- Pelletier, K.R. (2000). The best alternative medicine: What works? What does not? New York: Simon & Schuster.
- Shorter, E. (1992). From paralysis to fatigue: A history of psychosomatic illness in the modern era. New York: Free Press.

### ***Relating health psychology to other fields***

- de La Cancela, V., Chin, J., & Jenkins, Y. (1998). Community health psychology: Empowerment for diverse communities. New York: Routledge.

- Kazarian, S.S. & Evans, D.R. (2001). Handbook of cultural health psychology. San Diego, CA: Academic Press.
- Herman, C.E. (Ed.). (1997). Special issue: Psychological aspects of genetic testing. Health Psychology, 16.
- Lopez-Casasnovas, G., Rivera, B., & Currais, L. (2005). Health and economic growth: findings and policy implications. Cambridge: MIT Press.
- Sahler, O.J. & Carr, J.E. (2007). The behavioral sciences and health care. Cambridge, MA: Hogrefe.

***Journals related to health psychology***

- Journal of Behavioral Medicine
- Journal of Clinical Psychology in Medical Settings
- Journal of Health Psychology
- Journal of Immigrant Health
- Journal of Immigrant and Minority Health
- Journal of Psychosomatic Medicine

## **Suggested Films and Videos:**

### ***Psychology's role in health***

1. Achieving Psychosocial Health. (2001, Films for the Humanities and Sciences, 29 min). Explains the elements of psychosocial health.
2. Discovering Psychology (Program 23-24) (2001, WGBH Educational Foundation, 60 min). Program 23 examines psychological research related to the bio-psychosocial model of medicine.
3. Emotion and illness (1995, Films for the Humanities and Sciences, 30 min). Discusses the role that emotions play on physical health.

### ***Current Perspectives on health and illness***

4. Alternative Medicine. (2002, Films for the Humanities and Sciences, 52 min). A look at alternative medicine techniques from practitioners and respected critics.
5. Alternative medicine: Expanding your horizons in healthcare choices. (1995, Aquarius Productions, 29 min). Reviews alternative or complementary health systems, such as naturopathy, homeopathy, Chinese & Indian medicine, and others.
6. Medicine at the Crossroads: The Magic Bullet. (1993, WNET/BBC-TV, 57 min). Looks at the expectation that medicine can provide "a pill" to solve all health problems.
7. Medicine at the Crossroads: Code of Silence. (1993, WNET/BBC-TV, 57 min). Takes the viewer into the world of medical training, cross-cultural experiences with disease, and the patient interface with medical systems.
8. Medicine at the Crossroads: Temple of Science. (1993, WNET/BBC-TV, 57 min). The world of the teaching hospital is highlighted using Johns Hopkins as an example. Sophisticated technological successes and production of leading doctors/scientists are placed in contrast with primary care provision.

## **Internet sites of interest:**

### ***Psychology and Health***

1. <http://www.apa.org> - The American Psychological Association
2. <http://www.psychologicalscience.org> - American Psychological Society
3. <http://www.sbm.org/> -The Society of Behavioral Medicine
4. <http://www.apm.org/> - The Academy of Psychosomatic Medicine
5. <http://sosig.esrc.bris.ac.uk> - Social Science Information Gateway

### ***Women and Minority Health***

6. <http://www.4women.gov> – The National Women's Health Information Center
7. <http://www.pitt.edu/~ejb4/min/> - The Minority Health Network
8. <http://www.omhrc.gov/OMHRC/index.htm> - Office of Minority Health Resource Center

### ***Professional Organizations***

9. <http://www.aapa.org> - The American Academy of Physician Assistants
10. <http://www.aanp.org> - The American Academy of Nurse Practitioners
11. <http://www.aota.org> - The American Occupational Therapy Association
12. <http://www.apta.org> - The American Physical Therapy Association
13. <http://www.naswdc.org> - The National Association of Social Workers
14. <http://www.nln.org> - The National League for Nursing
15. <http://www.who.int> - World Health Organization
16. <http://www.cdc.gov/nchs> - National Center for Health Statistics
17. <http://www.census.gov> - United States Census Bureau

### ***Alternative Medicine***

18. <http://www.pitt.edu/~cbw/internet.html> - Alternative Medicine Resources Index
19. <http://www.altmedicine.com/> - Alternative Health News Online
20. <http://www.amfoundation.org/> - Alternative Medicine Foundation

## TEST QUESTIONS

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### True or False

- F (4) 1. Advances in medical treatment were responsible for a sharp decrease in infectious diseases at the turn of the 20<sup>th</sup> century.
- T (5) 2. Today, accidental injury is the leading cause of death in children and adolescents in the United States.
- F (6) 3. During the Middle Ages, the influence of the Church resulted in many major advancements in medical knowledge.
- F (9) 4. "Risk factors" are those biological or behavioral characteristics that are known to cause a disease.
- T (10) 5. In the past, practitioners of psychosomatic medicine generally used a psychoanalytic model to explain a physical symptom.
- T (11) 6. One of the goals of health psychology is to have an effect on public policy.
- T (13) 7. The biopsychosocial model of health and illness is actually an extension of the biomedical model.
- T (15) 8. The "systems" approach assumes simple systems are embedded within complex systems.
- F (20) 9. Although sociocultural research has found differences in health beliefs across cultures, disease patterns themselves do not differ.
- F (25) 10. Quasi-experimental designs allow us to make causal conclusions from existing groups.



## **Matching**

Match one of the following with descriptions given in questions one to five.

- a. Hippocrates
  - b. Plato
  - c. Galen
  - d. St. Thomas Aquinas
  - e. Descartes
- 
- c  
(6) 1. From his work, which included dissection, this second century physician felt that pathologies could be localized in parts of the body.
  - d  
(6) 2. An Italian philosopher, he saw the mind and body as an interrelated unit.
  - b  
(5) 3. He was among the Greek philosophers to propose that the mind and body are separate entities.
  - a  
(5) 4. Called "the father of medicine," his humoral theory for the origin of disease was influential for centuries.
  - e  
(6) 5. He described in mechanical terms the functioning of the body's actions and sensations such as pain.

Match the following with descriptions given in questions 6 through 10

- a. epidemiology
  - b. public health
  - c. medical sociology
  - d. medical anthropology
  - e. health psychology
- 
- e  
(12) 6. Provides direct service to patients in the management of their illnesses or engages in research and teaching.
  - a  
(17) 7. Concerned with the incidence and prevalence of illnesses.
  - b  
(18) 8. Organizes health education or provides community health services.
  - c  
(18) 9. May conduct studies of health care services and how they are organized.
  - d  
(18) 10. May conduct studies on the medical practices in different cultures.

### **Multiple Choice**

- c (2) 1. Claudia goes to the university health center complaining of a sore throat and headache. A blood test reveals that her white blood cell count is high, and a throat culture reveals a streptococcus infection. Which of the following is true?
- a. Claudia's high white blood cell count is a symptom of illness.
  - b. Her sore throat is a sign of illness.
  - c. The results of the blood test and throat culture are signs of illness.
  - d. Her headache and high white blood count are symptoms of illness.
- d (2) 2. Common definitions of health include
- a. optimal weight and endurance.
  - b. absence of signs of malfunctioning.
  - c. absence of subjective symptoms of disease.
  - d. both b and c.
- c (2) 3. In his continuum of illness and health, Aaron Antonovsky suggested that
- a. wellness and illness are independent concepts.
  - b. medical treatment affects only the wellness side of the continuum.
  - c. his model represents differing health statuses.
  - d. lifestyle has little impact on health or illness.
- b (2) 4. In discussing the illness and health continuum, Antonovsky emphasizes
- a. illness more than health.
  - b. a revised focus toward what helps people stay healthy.
  - c. the psychosocial factors that contribute to illness.
  - d. the role of poverty in health care.
- a (2) 5. The term "health", as used by the author of the textbook, is best described as
- a. a positive state of mental, social, and physical well-being.
  - b. the absence of illness.
  - c. the absence of disease risks.
  - d. lack of a terminal condition.
- d (3-4) 6. Infectious diseases were:
- a. more frequently fatal in the past than they are now.
  - b. brought over to North America by European settlers.
  - c. the greatest threat to American health in the 19th century.
  - d. all of the above
- d (4) 7. The decline in the death rate from infectious diseases by the end of the 19<sup>th</sup> century was largely the result of
- a. the development of antibiotics.
  - b. advances in medical treatment.
  - c. changing definitions of disease states in the medical community.
  - d. preventive measures.

- a  
(4) 8. A person living in the United States today
- a. is more likely to die of a chronic disease than any other cause of mortality.
  - b. has a shorter life span than someone who lived in the 19th Century.
  - c. is likely to be at high risk of dying of infections.
  - d. has an average life expectancy over 90 years.
- b  
(5) 9. The procedure referred to as trephination
- a. is effective in the treatment of chronic disease.
  - b. is believed to have been done in the past for superstitious reasons.
  - c. is frequently used today in the treatment of infectious diseases.
  - d. was based on the humoral theory of illness.
- d  
(5) 10. Hippocrates, the "Father of Medicine"
- a. suggested that eating a good diet would promote good health.
  - b. proposed the humoral theory of illness and wellness.
  - c. defined health as a balance of humors.
  - d. all of the above.
- c  
(5) 11. A "humor" is a
- a. type of emotional response.
  - b. spiritual state.
  - c. a bodily fluid.
  - d. all of the above
- a  
(6) 12. A main contribution of Galen to knowledge about illness
- a. was to discover that illness can be localized in specific parts of the body.
  - b. was to reject the humoral theory of Hippocrates.
  - c. was not appreciated until the 20th century.
  - d. was to reject the mind/body split.
- c  
(6) 13. The position of Rene Descartes on the mind/body problem can best be described as:
- a. agreeing with both Aquinas and Plato that the mind and body are unitary.
  - b. agreeing with Aquinas and disagreeing with Plato that the mind and body are unitary.
  - c. agreeing with Plato and disagreeing with Aquinas on the unitary nature of mind and body.
  - d. placing little to no emphasis on the mind.

- b  
(7) 14. Which of the following was NOT an advance in science and medicine in the 18th and 19th centuries?
- a. The growing use of dissection in autopsies to aid in the acquisition of knowledge.
  - b. The rejection of the belief that the mind and body are separate.
  - c. The discovery that microorganisms cause certain diseases
  - d. New surgical and anesthetic techniques.
- a  
(7) 15. The proposition that all diseases can be explained by disturbances in physiological processes
- a. is the basis of the biomedical model.
  - b. is no longer the dominant view in the field of medicine.
  - c. has never been widely accepted.
  - d. is consistent with an emphasis on psychosocial factors.
- c  
(7) 16. Dr. Lee believes that disease occurs independently from our psychological and social experience. Dr. Lee believes in the \_\_\_\_\_ theory.
- a. humoral
  - b. biopsychosocial
  - c. biomedical
  - d. trephination
- b  
(8) 17. Which of the following statements about chronic disease is true?
- a. Significant advances have been made in their treatment, to the point where they are no longer dangerous.
  - b. Although we know more about the causes of chronic diseases, advances in their treatment have been modest.
  - c. Psychological and social factors have little to do with these diseases.
  - d. Gains and survival rates from cancer between 1950 and 1987 are due to improved medical techniques.
- d  
(9) 18. Which of the following is NOT a risk factor for an individual developing cancer?
- a. high alcohol use
  - b. high fat diet
  - c. cigarette smoking
  - d. all of the above are risk factors
- b  
(9) 19. Risk factors for a health problem
- a. directly cause diseases.
  - b. are associated with diseases.
  - c. are largely unknown today.
  - d. are usually easily cured with medication.

- d  
(9) 20. Melody has been having a great deal of difficulty in her attempt to quit smoking. Which of the following might be reasons for her lack of success?
- a. She thinks getting cancer is not likely.
  - b. Her friends all smoke and don't think it's such a big problem.
  - c. She is addicted to nicotine.
  - d. all of the above
- d  
(9) 21. Smoking has been identified as a risk factor in each of the following health problems except
- a. stroke.
  - b. cancer.
  - c. chronic lung disease.
  - d. obesity.
- b  
(9) 22. In Belloc and Breslow's study of longevity and health practices
- a. longevity was not statistically related to most health behaviors.
  - b. the health of older participants who practiced all seven health habits was similar to that of much younger participants.
  - c. maintaining an appropriate weight was the best predictor of health.
  - d. eating multiple small meals was important.
- c  
(9) 23. Which of the following is NOT one of the healthful behaviors studied by Belloc and Breslow (1972)?
- a. never smoking cigarettes
  - b. never or only occasionally eating between meals
  - c. taking one aspirin per day
  - d. sleeping 7 to 8 hours a day
- d  
(10) 24. People whose personalities include high levels of \_\_\_\_\_ seem to be "disease-prone."
- a. anger & hostility
  - b. depression
  - c. anxiety
  - d. all of the above
- d  
(10) 25. Considering the psychosocial characteristics of the following people, which one is most likely to develop an illness?
- a. Fernando, a banker who works long hours.
  - b. Linda, a student who occasionally feels a bit sad and homesick.
  - c. Ling, an athlete who experiences mild levels of anxiety before her competitions.
  - d. John, an anxious and pessimistic news director who frequently "blows up" at his staff.

- c  
(10) 26. Jane feels a numbness in her hand and has been to several doctors, who have found no organic cause for her problem. She might be suffering from
- trephination.
  - behavioral modification.
  - conversion hysteria.
  - psychoanalysis.
- a  
(10) 27. Medical history notes for a young woman with a skin rash refers to her "conflicting feelings about being physically close to her husband". Her physician seems to accept a \_\_\_\_\_ explanation for her illness.
- psychosomatic
  - behavioristic
  - public health
  - humoral
- c  
(11) 28. Which of the following approaches would a specialist in behavioral medicine be most likely to use in treating a chronic headache?
- medicine
  - psychoanalysis
  - biofeedback
  - psychotherapy
- a  
(11) 29. The work on biofeedback by physiological psychologists has shown us that
- even internal functions like heart rate and blood pressure can be controlled with psychological methods.
  - the mind/body dichotomy really exists and can be measured.
  - psychoanalysis is effective in the treatment of high blood pressure.
  - biofeedback is an ineffective method of therapy.
- d  
(11) 30. Which of the following is the least likely to be studied by a modern health psychologist?
- why people do not use seat belts
  - how to design a media campaign to encourage healthful lifestyles
  - how patients are affected by characteristics of hospitals and nursing homes
  - how to differentiate organic symptoms from conversion hysteria
- b  
(11) 31. Which of the following is not an example of an indirect way that health psychologists help patients?
- Conducting research to discover information about lifestyles that affect health.
  - Providing therapy to a patient to assist in adjustment to a chronic illness.
  - Holding a training workshop for medical professionals regarding psychosocial characteristics of patients.
  - Designing new behavior change programs that will affect people's health.

- b  
(12) 32. Mei-Lin has lost the use of her legs after being in a biking accident. Her health psychologist is working with her to cognitively redefine the experience as a challenge rather than a disaster. This technique is classified as a(n) \_\_\_\_\_ method.
- a. ineffective
  - b. cognitive
  - c. behavioral
  - d. psychoanalytic
- d  
(13) 33. A biopsychosocial approach to dealing with an adolescent girl's weight problem would be likely to consider
- a. her family history.
  - b. how her weight problem affects her friendships.
  - c. how she feels emotionally about her weight problem.
  - d. all of these
- d  
(13) 34. Which of the following is true regarding the role of emotions in health and illness?
- a. People with positive emotions take better care of their health.
  - b. Fear prevents some people from obtaining medical care.
  - c. Recovery from illness can be affected by emotions.
  - d. all of the above
- a  
(15) 35. Which of the following is NOT true of the systems concept in health psychology?
- a. It takes into account an unchanging, interrelated group of parts.
  - b. By definition, a person qualifies as a system.
  - c. It is consistent with the biopsychosocial model.
  - d. Events in one system affect events in other systems.
- b  
(17) 36. Compared with older individuals, children
- a. experience the same number of chronic diseases as adults.
  - b. suffer from relatively few chronic diseases.
  - c. are more responsible for their own health.
  - d. have cognitive skills similar to those of adolescents and adults.
- c  
(17) 37. The life-span perspective in health psychology reveals that adolescents
- a. will be healthier than children because they are exposed to fewer infectious diseases.
  - b. typically follow the example of their parents more than their friends.
  - c. are powerfully influenced by peer pressure, often leading to poorer health practices.
  - d. respond to illnesses much like the elderly do.

- c  
(17) 38. Greg is a 15 year old who was diagnosed as a diabetic at age 4. For the first time, he now is not following his health regimen. The most probable explanation is
- a. he doesn't understand what he should do.
  - b. he secretly doesn't want to be healthy.
  - c. social pressures to avoid being "different" prevent him from taking proper care of himself.
  - d. he may be forgetting what to do and should have a neuropsychological examination.
- b  
(17) 39. When reporting the decrease in deaths from AIDS, an epidemiologist is discussing AIDS'
- a. morbidity.
  - b. mortality.
  - c. incidence.
  - d. prevalence.
- a  
(18) 40. An epidemiologist writes a report discussing the total number of previously reported and new cases of AIDS for the past 5 years. He is reporting on the disease's
- a. prevalence.
  - b. morbidity.
  - c. incidence.
  - d. mortality.
- c  
(18) 41. Dr. Yi is collecting data on the number of new cases of cholera in Beijing during the summer of 1997. Dr. Yi is studying the \_\_\_\_\_ of cholera.
- a. prevalence.
  - b. morbidity.
  - c. incidence.
  - d. epidemic.
- d  
(18) 42. An epidemic usually refers to a situation in which
- a. many people die from a disease.
  - b. a disease receives greater publicity.
  - c. the mortality rate of a disease increases.
  - d. the incidence rate of a disease has increased rapidly.
- a  
(19) 43. Wilbur has had a stroke and is now undergoing treatment by exercising and receiving electrical stimulation to his severely weakened muscles. The professional performing this treatment is most likely a
- a. physical therapist.
  - b. licensed practical nurse.
  - c. doctor.
  - d. medical anthropologist.



- a  
(20) 44. Cultural differences in illness patterns have been reflected by
- a. higher prevalence of stomach cancer in Japan than in the USA.
  - b. uniform cancer rates across the USA.
  - c. the devaluation of the importance of good health in the USA.
  - d. the universality of illnesses.
- d  
(20-21) 45. According to the textbook author, culture influences
- a. beliefs regarding the causes of health and illness.
  - b. accepted practices for curing illness.
  - c. norms or expectations on what to do when one is ill.
  - d. all of the above.
- b  
(21) 46. Religious beliefs and practices in the USA
- a. invariably lead to poorer health.
  - b. may either promote healthful living, or deter it, depending on the religion.
  - c. invariably promote good health.
  - d. have declined with the rise of health psychology.
- c  
(21-22) 47. Which of the following is not necessarily a component of a useful theory?
- a. It relates previously seemingly unrelated information.
  - b. It enables us to make predictions.
  - c. It has been proven to be correct.
  - d. It organizes known facts.
- d  
(22) 48. In a study of the effects of an anti-inflammatory drug on chronic jaw pain, one group receives an inactive substance in the form of a pill. This group receives
- a. the independent variable.
  - b. the dependent variable.
  - c. a control.
  - d. a placebo.
- b  
(23) 50. The method of experimental design in which the subject and the experimenter are unaware of which group they are assigned is called the
- a. experimental control.
  - b. double-blind procedure.
  - c. nonexperimental method.
  - d. quasi-experimental approach.

- a  
(23) 51. Which of the following illustrates a difference between experimental and non-experimental approaches to research?
- a. Only experimental methods can imply causation.
  - b. In nonexperimental methods, the researcher manipulates an independent variable.
  - c. Only experimental methods measure dependent variables
  - d. Nonexperimental methods test cause and effect relationships.
- a  
(24) 52. Nonexperimental or correlational studies
- a. can generate predictive information.
  - b. are not usually useful because they can't lead to causal inferences.
  - c. are not usually done anymore.
  - d. involve the manipulation of independent variables.
- b  
(24) 53. Researchers reported that there is a strong relationship between height and IQ: as height goes up, IQ goes up. They are reporting
- a. a negative correlation.
  - b. a positive correlation
  - c. a non-linear relationship.
  - d. no correlation.
- d  
(24) 54. A student researcher writes in his report that his statistical analysis revealed a correlation coefficient of +2.13 between the two variables in his study. His reported correlation coefficient
- a. indicates a negative correlation.
  - b. indicates a positive correlation.
  - c. is a significant result.
  - d. is an error.
- d  
(24 - 26) 55. A \_\_\_\_\_ study would NOT be an example of a quasi-experimental study.
- a. retrospective
  - b. prospective
  - c. longitudinal
  - d. correlational
- a  
(25) 56. To study the effects of cigarette smoking on breast cancer, 500 healthy teenaged girls were recruited to participate in a study that tracked their smoking (or nonsmoking) behavior and cancer incidence for five decades. This is an example of
- a. a prospective study.
  - b. an experiment.
  - c. a retrospective study.
  - d. a single-subject approach.

- c  
(26) 57. Suppose that a recent study found an increase in heart and lung disease among people aged 50-60. Further study revealed that, compared to people 20 years younger, these individuals tended to smoke more during their young adulthood, because they were not aware of the health effects of smoking at that time. This difference between individuals raised at different times is an example of
- a. the placebo effect
  - b. a cross-sectional approach
  - c. a cohort effect
  - d. a prospective study
- c  
(27) 58. Dr. Martinez is conducting an in-depth study of a patient exposed to farm pesticides. Dr. Martinez is probably using a
- a. cross-sectional design.
  - b. experimental design.
  - c. single-subject design.
  - d. twin study.
- b  
(28) 59. A reasonable assumption that can be made about monozygotic twins is
- a. they are likely to have many genetic differences.
  - b. differences between them are environmentally determined.
  - c. they will be reared in identical environments.
  - d. they are always same sexed.
- d  
(29) 60. In deciding which research methods to use, a researcher might keep in mind that
- a. it is never appropriate to use experimental and nonexperimental methods in the same study.
  - b. nonexperimental methods can still support causal explanations.
  - c. nonexperimental methods are rarely helpful in science.
  - d. experimental and nonexperimental methods can be effectively combined in the same study.

### **Short Answer Questions**

1. Provide a brief summary of Antonovsky's illness-wellness continuum. How does it differ from traditional definitions of health?
2. Review the two primary perspectives of the mind-body problem. How is the debate relevant to a discussion of health and illness?
3. Your job is to work with pediatric cancer patients. What developmental factors must you keep in mind as you proceed with your work?

### **Essay Questions**

1. Ten-year-old Juan has been diagnosed with diabetes. Describe his likely experience living with the disease from a biopsychosocial perspective.
2. Compare and contrast the disciplines of psychosomatic medicine, behavioral medicine, and health psychology.
3. You are interested in testing the effectiveness of a newly developed treatment for back pain. Outline your approach to your research project.