CHAPTER 1—PERSONALITY AND THE SCIENTIFIC OUTLOOK

CHAPTER OUTLINE

I. Why study personality? The study of human personality helps us understand ourselves and other people better and gives us a greater appreciation for the complexity of human experience.

II. Definition of **Personality**: Personality is the dynamic and organized set of characteristics possessed by an individual that uniquely influences his or her cognitions, motivations and behaviors in various situations.

III. Personality and Science: Personality is a scientific enterprise concerned with the description, explanation, prediction, and control of events.

A. Components of Science: Theories and Research Methods

1. What are **theories**? A theory is a system of interrelated conceptual statements that are created by investigators to account for a phenomenon or a set of phenomena.
2. Kinds of theories

a. **inductive**-sets of general summary statements about phenomena derived from facts.

b. **deductive**-theories in which specific hypotheses are derived from abstract propositions and then tested by the collection of data. Deductive theories consist of postulates, propositions, conceptual definitions, operational definitions, hypotheses, and empirical observations.

1. **postulates**-the fundamental or core assumptions of a theory. They are taken as self-evidently true in order to provide a clear and focused direction for theorizing and research.
2. **propositions**- general relational statements that may be true or false. They are not tested directly; instead, hypotheses are derived from them.
3. **hypotheses-**specific propositions containing constructs that are conceptually defined and operationalized so they can tested and confirmed or disconfirmed through empirical testing. Hypotheses are tentative theoretical statements about how events are related to one another, often stated as predictions.

a. **a prior predictions**-predictions made before the collection of data.

4. **conceptual definitions**- concepts in the hypotheses are defined precisely so that accurate measures of the concepts can be devised.
5. **operational definitions**- procedures (or operations) used to define particular constructs.
6. **empirical observations**-observations of phenomena made by investigators.

1V. Research Methods Used to Test Theories

A. **Experimental Method**-technique for studying cause-and- effect relationships between variables. It involves the manipulation of independent variables and observation of the effects of the manipulation(s) on dependent variables.

1. **independent variables**-the variables actively manipulated by the experimenter so that their effects on individual behavior can be observed.

2. **dependent variables**-changes in behavior that occur as a result of the manipulation of conditions by an experimenter.

3. **control group**-the group that does not receive the experimental treatment. It is designed to provide baseline data against which the effects of the experimental manipulation(s) on the dependent variable(s) can be accurately judged.

B. **Correlational Method**-general procedure for establishing an association or relationship between events.

1. **positive correlation**-increases in the scores on one variable are associated with increases in the scores on the other variable.

2. **negative correlation**-increases in the scores on one variable are associated with decreases in the scores on the other.

3. **no relation**-the distributions of scores on the two variables are random

C. **Case Study Method**-technique involving the intensive study of a single person in order to understand his or her unique personality and behavior.

1. **post-hoc explanation**-explanation of a phenomenon given *after* its occurrence.

V. Ethics for Conducting Research

A. **informed consent**-the practice of telling study participants about the nature of their participation in a proposed experiment and then obtaining their written agreement to participate.

B. **debriefing**-informing study participants of the true nature and purpose of a study after it is completed.

VI. Criteria for Evaluating Theories

A. **Comprehensiveness**-theories are judged as more adequate and useful if they encompass and account for a wide range and variety of phenomena.

B. **Precision and testability**- adequate theories should contain constructs and relational statements that are clearly and explicitly stated and measured. Under such conditions, theories can be more accurately tested.

C**. Parsimony**- adequate theories should be as economical as possible, while still adequately accounting for the phenomena in their domain.

D. **Empirical validity**- the hypotheses of theories are tested by the collection of data to determine whether or not they are accurate.

E. **Heuristic value**- adequate theories should be challenging; they should stimulate new ideas and new research.

F. **Applied value-** adequate theories are capable of providing creative solutions to problems that are of interest and concern to people in society.

CLASSROOM TOPICS FOR LECTURE, DISCUSSION, AND DEMONSTRATION

Judging the Scientific Worth of a Theory: Which Criterion is Most Important?
Present the 6 criteria for judging the scientific worth of a theory and ask the students which one of them is the most important. Since most students, especially those who have taken several courses in psychology, are imbued with the need to have data to support whatever conclusions they reach and will immediately say empirical validity. You can then mention that you're not so sure. You can create a theory on the spot that lacks comprehensiveness but has massive empirical support. Walk up the classroom aisle until you find a male and a female sitting next to one another. Then tell the students you will create a theory of infatuation, saying that if the female likes the male sitting next to her, she will figure that if she sits next to him at each session, that they will begin to talk, come to like one another, and that he will eventually ask her out. Then tell the class that you predict on the basis of your theory that, class after class, she will sit next to him. And she does; thus, there is massive empirical support for your theory. Point out that while the theory has massive empirical support, it's not the most useful theory in the universe. It's too limited. It can't compare with the comprehensiveness of Freud's theory which explains vast numbers of phenomena, e.g., marriage, war, friendship, incest, dreams, accidents on the job, even though empirical support for the theory is mixed. As another example, you can mention that, if a theory is imprecise and therefore the scientist is unable to test it adequately, it will very likely yield data that are questionable. So the theory's empirical validity depends on its precision and testability. You can then draw the conclusion that all of the criteria are important and interrelated and that it makes little sense to argue that any one criterion by itself is most important.

LEARNING GOALS

At the conclusion of Chapter 1, your students should be able to:

1. define personality from the perspective of professional personality psychologists and from the perspective of laypeople and to explain why personality psychologists see laypeople's definition of the term as inadequate and unscientific.
2. define scientific theory and to describe the differences between deductive and inductive theories.
3. define research methods and to explain the differences between the experimental, correlational, and case study techniques.
4. describe the differences between a priori and post hoc explanations.
5. name the six criteria that are used by personality psychologists to judge the scientific worth of theories and to be able to give a rationale for why the criteria are all interrelated and important and why judgments about theories' scientific worth need to take this interrelatedness into account.

TESTBANK

MULTIPLE CHOICE

1. Personality is:
   a. easy to define precisely.
   b. defined best in terms of a person's social attractiveness to others.
   c. an abstraction that refers to the internal instincts of a person.
   d. the scientific study of individual differences.

ANS: d

2. There is basic agreement among personality psychologists that personality is a(n):
   a. physical reality.
   b. instinct.
   c. complex abstraction.
   d. common genetic thing.

ANS: c

3. Theory-based predictions are called:
   a. hypotheses.
   b. psychological constructs.
   c. empirical observations.
   d. physical observations.

ANS: a

4. If people who are more dominant tend also to be more anxious, we would say that the correlation between the two traits is:
   a. positive.
   b. neutral.
   c. nonexistent.
   d. negative.

ANS: a

5. If Bill explains Mark's aggressive behavior at a party by saying it was caused by feelings of insecurity, we would conclude that this explanation is a(n):
   a. post hoc conclusion.
   b. a priori conclusion.
   c. scientifically valid conclusion.
   d. scientifically reliable conclusion.

ANS: a

6. Science is an enterprise that:
   a. leads to the accumulation of absolute facts.
   b. is concerned with the description, explanation, prediction, and control of events.
   c. leads to the accumulation of systematized knowledge based on speculation.
   d. is pursued by impersonal and bias-free scientists.

ANS: b

7. Operational definitions of concepts are important because they:
   a. provide an objective and reliable basis for communication among scientists.
   b. are equivalent in many respects to conceptual replication schemes.
   c. allow the scientist to accumulate hard and absolute facts.
   d. provide a key operation for our data and facts.

ANS: a

8. The variables actively manipulated by the experimenter are called:
   a. replication variables.
   b. independent variables.
   c. control variables.
   d. dependent variables.

ANS: b

9. The measures of changes in behavior that occur as a result of the manipulation of conditions by an experimenter are called:
   a. dependent variable changes.
   b. independent variable changes.
   c. control group manipulations.
   d. independent constants.

ANS: a

10. In their study on self-affirmation, Creswell, Welch, Taylor, Sherman, Gruenwald, and Mann found that:
   a. self-affirmation usually makes people feel immoral, incompetent, and inadequate.
   b. people who affirmed themselves by thinking about their most important values were better able to cope with the stress generated by a challenging task.
   c. stress associated with a boring task was unrelated to study participants' cortisol levels.
   d. people who failed to affirm themselves were better able to cope with the stress generated by a boring and complicated task.

ANS: b

11. A perfect negative correlation would be written:
   a. -3.00.
   b. -1.00.
   c. -2.50.
   d. +1.00.

ANS: b

12. Positive correlations between variables occur when:
   a. high scores on one variable are associated with low scores on another variable.
   b. high scores on one variable are associated with high scores on another variable.
   c. high scores and low scores are significantly related in a negative way.
   d. low scores on a key variable are related to high scores on a second variable.

ANS: b

13. A correlational technique that allows an investigator to assess the relationship between two variables by eliminating the influence of other variables is called a(n):
   a. error correlation.
   b. crystal correlation.
   c. elimination correlation.
   d. partial correlation.

ANS: d

14. The case history method involves:
   a. the study of typical differences in personality between people.
   b. assessment of the impact of independent variables on given dependent variables.
   c. intensive study of a person's behavior over a period of time and in many different situations.
   d. correlation between two variables in the person's life history that the therapist deems important.

ANS: c

15. The use of the case study method:
   a. allows an investigator to make causal inferences about behavior.
   b. may lead to serendipitous findings that are the source of new and interesting testable hypotheses.
   c. yields data that are easily applicable to people in general.
   d. allows an investigator to control systematically and account for the variables under his or her scrutiny.

ANS: b

16. A "good" theory should encompass and explain a wide range and diversity of phenomena. This statement refers to the theory's:
   a. precision.
   b. testability.
   c. applied value
   d. comprehensiveness.

ANS: d

17. A "good" theory should stimulate thinking and research. This statement refers to the theory's:
   a. testability.
   b. heuristic value.
   c. applied value.
   d. precision.

ANS: b

18. A "good" theory must be capable of generating accurate predictions of behavior. This statement refers to the theory's:
   a. heuristic value.
   b. testability.
   c. empirical validity.
   d. applied value.

ANS: c

19. A "good" theory should contain only those concepts and assumptions that are necessary for the explanation of events within its domain. This statement refers to the theory's:
   a. rigor.
   b. testability.
   c. applied value.
   d. parsimony.

ANS: d

20. A "good" theory leads to new approaches to the solution of people's problems. This statement refers to the theory's:
   a. precision.
   b. applied value.
   c. comprehensiveness.
   d. testability.

ANS: b

21. Another term for data is:
   a. prediction.
   b. sample.
   c. empirical evidence.
   d. postulate.

ANS: c

22. Science involves an intertwining of two major processes:
   a. research and correlational techniques.
   b. case studies and correlational techniques.
   c. hypothesis and theory.
   d. theory and method.

ANS: d

23. The case study method provides:
   a. data that are easily applied to people in general.
   b. data stressing the average or typical differences between individuals.
   c. information on the consistencies of the person's behavior.
   d. a view of the uniqueness of the person.

ANS: d

24. A highly complex abstraction which encompasses a variety of dimensions is called a:
   a. criterion.
   b. constructive entity.
   c. psychological construct.
   d. replication.

ANS: c

25. A fundamental assumption in a theory from which hypotheses can be derived is called a(n):
   a. scientific method.
   b. postulate.
   c. concrete reality.
   d. spatial ability.

ANS: b

26. A numerical index of the probability that a particular result occurred by chance is called:
   a. abstraction significance.
   b. statistical significance.
   c. probability norm.
   d. hypothetical norm.

ANS: b

27. The establishment of a reliable relation between variables is called a:
   a. hypothesis.
   b. postulate.
   c. prediction.
   d. law.

ANS: d

28. A person's written or oral description of his or her own behavior is called a(n):
   a. concrete behavior.
   b. self-report.
   c. experimental method.
   d. controlled behavior.

ANS: b

29. Predictions made before the collection of data are called:
   a. a priori predictions.
   b. post hoc predictions.
   c. operational predictions.
   d. law predictions.

ANS: a

30. In deductive theories, the definitions of the constructs in the hypotheses which must be stated clearly are called:
   a. empirical definitions.
   b. operational definitions.
   c. literary definitions.
   d. conceptual definitions.

ANS: d

31. A good example of the case study method is Freud's analysis of the personality of:
   a. Leonardo Da Vinci.
   b. Rembrandt.
   c. Vermeer.
   d. Picasso.

ANS: a

32. One of the major postulates of self-affirmation theory is that:
   a. each of us likes conflict.
   b. each of us has a unique self.
   c. some people have unique selves.
   d. masochism is associated with self-affirmation.

ANS: b

33. According to Ryckman, a completely adequate theory of personality:
   a. will be constructed by a personality psychologist in the next decade.
   b. has already been constructed by several personality theorists.
   c. will never be constructed.
   d. was once constructed in the early 1900s by a French physician.

ANS: c

34. If Jim observes Karen's behavior in a number of situations and concludes that she has a "decent personality", personality psychologists would claim that he is:
   a. defining her personality accurately.
   b. using the layperson's definition of personality.
   c. defining her personality scientifically.
   d. basing his judgment on an objective assessment of her behavior and attitudes.

ANS: b

35. An explanation of a phenomenon given <u>after</u> its occurrence is called a(n):
   a. a priori explanation.
   b. previous explanation.
   c. post hoc explanation.
   d. postulate.

ANS: c

36. There is basic agreement among personality psychologists that:
   a. personality theories are all the same in terms of the predictions they make.
   b. personality theories typically study identical phenomena.
   c. the kind of theories that theorists construct depend to some extent on the theorists' personalities.
   d. personality theories provide unequivocal hypotheses which yield highly consistent data.

ANS: c

37. Theories that are created from a solid base of data are called:
   a. deductive theories.
   b. hypothetic-deductive theories.
   c. inductive theories.
   d. generalized deductive theories.

ANS: c

38. Theories that are invented in order to account for facts are called:
   a. inductive theories.
   b. generalized moral speculations.
   c. metaphorical inductive theories.
   d. deductive theories.

ANS: d

39. When experimenters provide study participants with a description of the true nature and purpose of a study after it is completed, we can conclude that:
   a. participants have not given their informed consent.
   b. participants have been debriefed.
   c. the experimenters are unethical.
   d. the experimenters can now proceed to solicit the participants' informed consent.

ANS: b

40. The law of effect is a theoretical summary statement that was based on a(n):
   a. deductive approach to theory construction.
   b. inductive approach to theory construction.
   c. a set of general theoretical propositions.
   d. a priori theorizing.

ANS: b

41. If Professor Judson is stimulated to do research on dreaming after reading Freud's The Interpretation of Dreams, we could say that:
a. Freud's views had heuristic value for the professor.
b. Freud's theory had little value for the professor.
c. Freud's theory was so economical that the professor couldn't wait to test it.
d. even though the professor believed the theory was completely accurate he decided to test it anyway.

ANS: a

42. In the Katz, Fromme, and D'Amico study which examined the relationship between personality traits and various illicit behaviors, it was found that:
a. low sensation seekers were more likely than high sensation seekers to engage in heavy drinking.
b. high and low sensation seekers both tended to engage in the same level of illicit drug use.
c. high sensation seekers abstained from heavy smoking, whereas low sensation seekers did not.
d. high sensation seekers were more likely than low sensation seekers to engage in heavy drinking.

ANS: d

43. The groups in an experiment that provides baseline data so that the effectiveness of the independent variable manipulation can be accurately assessed is called the:
a. assessed group.
b. dependent group.
c. control group.
d. independent group.

ANS: c

44. Studies which provide some information on cause-and-effect relationships are called:
a. correlational studies.
b. independent studies.
c. case studies.
d. experiments.

ANS: d

45. If Larry believes that John will start a fight with someone at the next party if he drinks too much beer, we would say that this belief is Larry's:
   a. axiom.
   b. data.
   c. philosophy.
   d. hypothesis.

ANS: d

46. In an experiment, the group that does not receive the experimental treatment is called the:
   a. independent group.
   b. dependent group.
   c. control group.
   d. study group.

ANS: c

47. Recorded observations of phenomena are called:
   a. data.
   b. propositions.
   c. postulates.
   d. hypotheses.

ANS: a

48. A "good" theory should help to solve problems that are of concern to people. This statement refers to the theory's:
   a. basic value.
   b. parsimony.
   c. applied value.
   d. testability.

ANS: c

49. When the exact purpose of an experiment is explained to a study participant after the experimental session, it is a(n):
   a. experiment.
   b. debriefing.
   c. consent form.
   d. uninformed consent form.

ANS: b

50. Theories which consist of a set of assumptions from which hypotheses are derived and then tested are called:
a. inductive theories.
b. data theories.
c. questionnaire-based theories.
d. deductive theories.

ANS: d

51. One limitation of defining personality in terms of the social attractiveness of the person is that it:
a. defines personality in terms of a moral evaluation of the person being evaluated.
b. assesses personality as primarily rooted in biology.
c. prevents the description of the personalities of certain people.
d. is that only women can be defined in terms of physical attractiveness.

ANS: a

52. If people who are more intelligent also tend to be less anxious, we would say that the correlation between the two traits is:
a. positive.
b. negative.
c. neutral.
d. nonexistent.

ANS: b

53. The study participants who experience the intentional alteration of a factor(s) in an experiment is called the:
a. control group.
b. partial correlational group.
c. unmanipulated group.
d. experimental treatment group.

ANS: d

54. Research findings that are based on testing hypotheses are:
a. never determined statistically.
b. always considered absolutely proven.
c. always determined statistically.
d. nearly always irrelevant to the study's objectives.

ANS: c

55. Prominent thinkers in the philosophy of science contend that:
a. there is only one theory in each of the so-called mature sciences, not many competing theories.
b. it is rare for any single theory to achieve unquestioned leadership or dominance in a discipline.
c. psychology is a mature science because it has only a single theory.
d. psychology and physics are the only disciplines to use competing theories to explain phenomena.

ANS: b

56. If Bob observes Jim's behavior in a few situations and concludes that he has a "lousy" personality, personality psychologists would claim that Bob is:
a. defining Jim's personality scientifically.
b. using the layperson's definition of personality.
c. making an objective judgment about Jim's personality.
d. basing his judgment about Jim's personality on certain instinctual urges that he can see in Jim's behavior.

ANS: b MSC: WWW

57. If Jill believes that John will start a fight if he sees her partying with Joe, we would say that this belief is Jill's:
a. postulate.
b. philosophy.
c. hypothesis.
d. axiom.

ANS: c MSC: WWW

58. The finding which indicates that the greater the hypercompetitiveness of students, the lower their altruism reflects a:
a. positive correlation.
b. negative correlation.
c. curvilinear correlation.
d. lack of association between the two variables.

ANS: b MSC: WWW

59. A perfect, positive correlation would be written:
a. +2.00.
b. -1.00.
c. -2.00.
d. +1.00.

ANS: d MSC: WWW

60. In an experiment, the group of study participants that does not receive the experimental treatment is called a:

a. correlational group.
b. manipulated group.
c. control group.
d. experimental group.

ANS: c MSC: WWW

COMPLETION

1. The dynamic and organized set of characteristics of a person that uniquely influences his or her cognitions, motivations, and behaviors is called _____.

ANS: personality

2. A theory-based prediction is called an _____.

ANS: hypothesis

3. The fundamental or core assumptions of a theory are called _____.

ANS: postulates

4. _____ theories are created from a solid data base of empirical observations.

ANS: Inductive

5. _____ theories consist of postulates and a set of interrelated and internally consistent propositions, from which specific hypotheses are derived logically and made testable by means of operational definitions.

ANS: Deductive

6. When findings can be _____, investigators are more confident of their validity.

ANS: replicated

7. In the experimental method, the investigator actively manipulates the _____ variables.

ANS: independent

8. The correlational method expresses the direction and size of the link between two variables by a statistical device called the _____.

ANS: correlation coefficient

9. The intensive study of a given person over a long period of time is called _____.

ANS: case study

10. A theory that contains more constructs and assumptions than necessary fails to meet the test of _____.

ANS: parsimony

11. A theory that covers a wide range of phenomena is _____.

ANS: comprehensive

12. A theory that has much data to support it meets the criterion of _____.

ANS: empirical validity

13. A theory that is stimulating and generates new theorizing and research has strong _____.

ANS: heuristic value

14. A theory that helps to solve social problems has strong _____.

ANS: applied value

15. A theory that has well-defined concepts meets the criterion of _____.

ANS: precision

TRUE/FALSE

1. Many investigators define personality as the scientific study of individual differences.

ANS: T

2. Scientific theories are idle speculations that are rarely tested.

ANS: F

3. Most personality psychologists think that theories are not simply derived from facts, but are invented to explain them.

ANS: T

4. The variables actively manipulated by experimenters are called dependent variables.

ANS: F

5. The size of a correlation indicates the direction of the association between two variables.

ANS: F

6. The use of the case study method by investigators allows them to systematically control variables and to draw causal connections between them.

ANS: F

7. A theory that encompasses one or two phenomena is comprehensive.

ANS: F

8. A heuristic theory is one that stimulates new theorizing and research.

ANS: T

9. A good theory must have data that support it.

ANS: T

10. A good theory always meets the parsimony criterion if it has only a few concepts and no assumptions.

ANS: F

ESSAY

1. What is personality? What are some of the limitations of current definitions of the term?

ANS: Answer not provided

2. What is a scientific theory? Discuss the relationship between propositions and hypotheses.

ANS: Answer not provided

3. What does a correlation coefficient signify? Explain the differences between positive and negative correlations. Give examples of each kind of correlation.

ANS: Answer not provided

4. Describe the criteria used by investigators to assess the worth of scientific theories.

ANS: Answer not provided

5. Discuss the strengths and weaknesses of the case study method.

ANS: Answer not provided

6. List the essential differences between the inductive and deductive approaches to theory construction.

ANS: Answer not provided

7. Why are control groups used by investigators who are testing hypotheses using the experimental method?

ANS: Answer not provided

8. Describe Steele's theory of self-affirmation and the research designed to test its validity.

ANS: Answer not provided

9. What are operational definitions of concepts? Why are they crucial for the testing of hypotheses?

ANS: Answer not provided

10. Why are attempts at replication of studies important to the scientific understanding of phenomena?

ANS: Answer not provided