The Psychology of Personality

An Overview

1

Chapter Overview: A Preview of Coming Attractions

People use the word *personality* every day. They say, "He has such a dynamic personality" or "She gets her personality from her mother's side of the family." But most people do not really understand what the study of **personality** is all about. Chapter 1 sets the stage for our study of personality. In this chapter, you will learn what **personality psychologists** mean by personality, as well as the types of questions they ask, the research methods they use, and the ethical parameters within which they operate.

COPYRIGHTED MATERIAL

Chapter Overview

Defining Personality
- How Personality Psychologists Define Personality

Common Features of Definitions of Personality
- Uniqueness of the Individual
- Consistency of Behavior
- Content and Process of Personality

The Scope of Personality Psychology
- Theory Development
- Personality Research
- Personality Development
- Personality Assessment
- Applications in Personality Psychology

Research Methods in Personality Psychology
- The Clinical Approach
- The Correlational Approach
- The Experimental Approach

Research Ethics: Protecting the Individual's Rights
- Some Ethical Concerns
- Some Solutions to Ethical Issues

Chapter Summary

Glossary

Defining Personality

Welcome to the psychology of personality! Among all the research areas in the science of psychology, personality psychology is notable in the way it effortlessly meshes with the fabric of our lives – our everyday situations, problems, and relationships. You will see this demonstrated through the numerous applications of personality research woven throughout every chapter of this text.

This text has been carefully written to help you succeed in the class you are taking. As you read the chapters, you'll notice a number of special elements designed to help you monitor comprehension. The chapter outlines show the progression of topics and subtopics; key terms are printed in boldface; photos, figures, and tables dramatize and organize material; and chapter summaries provide a concise overview of the main points. Each chapter in this book also contains a number of special feature boxes that will challenge you to zero in on certain aspects of classic personality theory, research, assessment, and processes – and to expand your knowledge of contemporary findings, cross-cultural aspects, and applications of personality psychology.

Part I of this text will help you understand the general principles and scope of personality psychology. Part III comprises a survey of basic assumptions, principal processes, assessment techniques, and practical applications associated with each major theoretical viewpoint. In Part III, you will see a shift in emphasis from viewpoints to a consideration of selected topics addressing important personal and social issues with a rich tradition in personality psychology. I hope that you enjoy learning about the complexity of personality and the personal insights that come to you as you navigate this text.

How Personality Psychologists Define Personality

What does the word *personality* mean to you? The way personality psychologists define it has changed over the years (McAdams, 1997; Pervin, 1990; Winter & Barenbaum, 1999), reflecting theoretical and empirical advancements made in the study of personality, which you will be exposed to throughout this book. Think for a moment about the word and how it is used. Now compare your definition with those of some prominent personality psychologists:

- "That which permits a prediction of what a person will do in a given situation" – Raymond B. Cattell (1950, p. 2).
- "The most adequate conceptualization of a person's behavior in all its detail" – David McClelland (1951, p. 69).
- "A person's unique pattern of traits" – J. P. Guilford (1959, p. 5).
- "The dynamic organization within the individual of those psychophysical systems that determine his characteristic behavior and thought" – Gordon W. Allport (1961, p. 28).
- "The distinctive patterns of behavior (including thoughts as well as 'affects,' that is, feelings, and emotions and actions) that characterize each individual enduringly" – Walter Mischel (1999, p. 4).
- "Personality represents those characteristics of the person that account for consistent patterns of feeling, thinking, and behaving" – Lawrence A. Pervin and Oliver P. John (2001, p. 4).
- "Personality refers to an individual's characteristic patterns of thought, emotions, and behavior, together with the psychological mechanisms – hidden or not – behind those patterns" – David C. Funder (2001, p. 2).
- Traits of personality "are classified by the adaptive problems they were designed to solve and . . . traits evolve as a function of the adaptive problems faced by the organism over evolutionary time" – Figueredo et al. (2005, p. 871).

After reading these quotations from the experts, you might conclude that there are almost as many definitions of personality as there are authors (Pervin, 1990) – and you would be right. But note that each definition expresses a common concern for using personality to help predict and explain people's behavior. Keep in mind that like other complex concepts (e.g., the origin of the universe) and interesting phenomena (e.g., why people fall in love) the human personality is not easily defined. Thus, just as you are willing to accept a diversity of explanations for other complex and interesting phenomena in your own life, so should you be willing to accept a diversity of explanations for one of life's most interesting

phenomena – the understanding of your personality and those around you. Ideally, as you make your way through this text you will develop a healthy tolerance for diversity and an appreciation that most of the important things in life do not come packaged in simple, concise categories.

Common Features of Definitions of Personality

Developing a definition of personality that is accepted by everyone studying personality does seem difficult. But it is useful to identify certain features common to most of these definitions.

Uniqueness of the Individual

Most definitions of personality include some statement about the uniqueness of an individual's personality. This uniqueness can be explained from various theoretical viewpoints held by different personality psychologists. A *biological* viewpoint, with its emphasis on genetics and physiological processes, might consider differences in bodily processes (e.g., hormonal levels and brain functioning). A *dispositional trait* viewpoint might assert that certain human qualities are stable even as they are displayed across diverse settings (e.g., being conscientious at work and while hiking in the mountains). A *learning* viewpoint, with its emphasis on the effect of experience on behavior, might consider distinctive reinforcement patterns (e.g., extraversion being rewarded). A *cognitive viewpoint* would emphasize individual differences in the interpretation of environmental cues and the behavioral expectations and consequences associated with these cues (e.g., being cooperative at work but aggressive when playing tennis). A *phenomenological* viewpoint might emphasize subjective experience and self-determination (e.g., your career as an expression of your passion for protecting the environment). An *evolutionary viewpoint* would emphasize the adaptive significance of certain personality characteristics (e.g., aggressive behavior serves as protection of territory and food sources). A *cross-cultural* viewpoint might highlight the impact of societal norms and local customs on the expression of individual differences. And a *Freudian* viewpoint, with its focus on internal forces, might emphasize early childhood experiences (e.g., parent–child interactions). But regardless of the theoretical viewpoint or perspective, any definition of explanation of personality should take into account that each person is unique.

Consistency of Behavior

Personality psychologists generally assume some degree of continuity in an individual's personality. As a result, another feature common to most definitions of personality is a concern for the consistency of behavior across time and situations. For example, by assuming consistency across time, personality psychologists can link high-risk behavior in high school (e.g., riding a motorcycle) with a decision in adulthood to enter a high-risk occupation (e.g., becoming a police officer). By assuming consistency across situations, researchers can link the competitive nature of a tennis player with the desire to be the top sales representative in his or her company. If behavioral consistency did not exist, studying personality would make little sense.

Emphasizing behavioral consistency does not mean an individual's personality never changes. Concerns with the consistency of behavior are at the heart of some of the most controversial debates in personality psychology. The degree of behavioral consistency is influenced by the extent to which situational factors, as well as one's personality, determine thoughts, feelings, and behavior.

Content and Process of Personality

In the words of highly regarded personality psychologist Gordon W. Allport, "Personality is something that does something" (1937, p. 48). By *is* something, Allport refers to the *content* of personality. Each major personality theory discussed in this book offers a somewhat different explanation of the basic content of the human personality. By *does* something, Allport refers to the *process* of personality, the dynamic nature by which the contents of the personality influence the individual's thoughts, feelings, and behavior.

The content and process features of personality are interrelated. Across time and situations, the basic makeup of the human personality directly influences how the personality operates. For example, some personality psychologists assume that various traits make up the basic content of the human personality and also influence behavior. They would explain the aggressive

Summing It Up *Common Features of Definitions of Personality*

Common Features	Examples	Research Issues
Uniqueness of the Individual: Each person is different.	While Joe responded to receiving a "D" on his history test by reviewing the quality of his class notes, Sam dealt with his "D" by going to a local pub to "drown" his misery.	What is the nature of this uniqueness (e.g., unique combinations of traits or genes or different learning histories)?
Uniformity of Behavior: Behavior of the individual is consistent over time and across situations.	Rosemary is very friendly toward her fellow employees at work and her guests at the parties she gives.	To what extent do situational and personality factors interact to determine our behavior?
Content and Processes: Personality consists of something that influences behavior.	Because Mary has failed her French test, she also expects to fail her psychology test and, therefore, does not study for it that night.	How do our expectations in one situation influence our behavior in others?

style of the office tyrant across a variety of situations as resulting from a personality that contains a combination of the traits of aggressiveness and hostility. They would attribute variations in the uniqueness and behavioral consistency of other office workers to other numerous combinations of personality traits.

Combining common features to formulate a definition of personality is significant, because it determines how a personality psychologist views the development, measurement, and modification of the human personality. Thus, a definition of personality is far more than simply a series of words. A summary of the major points discussed in this section is presented in "Summing It Up: Common Features of Definitions of Personality" above.

The Scope of Personality Psychology

The scope of personality psychology goes far beyond simply defining terms. What do personality psychologists do? Some general areas of study presented in this section include the formulation and testing of personality theories, the developmental aspects of personality, the assessment of personality, and the application of personality psychology to many aspects of our daily lives.

Theory Development: Viewpoints of Personality

Theory development is one of the most important areas of study within personality psychology. A **theory** is a systematic collection of explanations that are used to account for a set of observations and predict future observations. A theory serves many important purposes in the study of personality. A particular theoretical viewpoint determines the research questions that are asked about personality, the methodology used to answer these questions, what is done to influence personality development, and the treatment used to modify an individual's personality, if a change is necessary.

Many different theoretical viewpoints of the human personality exist, each explaining personality from a different perspective (Millon & Grossman, 2006; Sommers-Flanagan & Sommers-Flanagan, 2004; Wiggins, 1999). Figure 1.1 illustrates how the same behavior is interpreted differently from various theoretical viewpoints. *None of the different perspectives is right or wrong; they simply vary in how useful they are in helping personality psychologists to understand behavior.*

As an example of this important point, consider the two contrasting perspectives of personality provided by the biological and cultural viewpoints. The

biological viewpoint of personality focuses on biological processes operating within the individual – such as genetic makeup, hormonal factors, physiological arousal, and brain chemistry – to explain the operation and expression of an individual's personality. The material presented in "At the Cutting Edge of Personality: Searching for Genetic Explanations of Personality" exemplifies such a biological explanation.

AT THE CUTTING EDGE OF PERSONALITY PSYCHOLOGY

Searching for Genetic Explanations of Personality

The Gene–Brain–Personality Chain: Creating Some Important Links

One of the most exciting areas of research in the study of personality psychology has to do with the identification of genes linked with personality traits (Azar, 2002; Canli, 2006; DiLalla, 2004). Although the term *personality* is often used to describe the characteristic manner in which an individual responds to environmental conditions (e.g., a "hot-headed individual" honks her horn when experiencing delays in traffic and expresses anger at the cashier while being held up at the checkout line at the supermarket), geneticists studying personality are searching for the underlying biological bases of these reactions. The goal of this research is to identify genes that affect brain function and then, in turn, to examine how the brain affects the way individuals interact with and adjust to their environments (Benjamin, Ebstein, & Belmaker, 2002; Nelson, 2006).

Although the possibility that many different genes may influence the expression of specific personality traits certainly complicates our understanding of the genetic influence on personality, some possible links are being identified in the gene–brain–personality relationship (Benjamin et al., 2002). For example, the personality trait of sensation seeking (e.g., a high level of brain arousal and the seeking of new and different experiences), more commonly know as "thrill seeking," has been linked with a protein-producing gene that is responsible for producing a dopamine receptor in the brain called DRD4 (Zuckerman, 2006). Dopamine, a chemical substance produced in the brain, stimulates arousal in the brain and triggers behavioral responses. Investigation of the DRD4 gene suggests that it is linked with certain thrill- or sensation-seeking tendencies, such as drug abuse and attention-deficit hyperactivity disorder (ADHD; Benjamin et al., 2002; Plomin & Crabbe, 2002). It is possible that an increased presence of this gene creates an elevated level of arousal in the brain that some individuals choose to satisfy with the novelty, excitement, and risk associated with drug abuse. In a similar manner, the inability of individuals with ADHD to concentrate, focus their attention, and control their impulses, all of which can lead to learning disabilities, may be due in part to an elevated arousal level created by increased presence of this gene.

Researchers do not yet understand how the presence of the DRD4 gene, along with its interaction with other genes, influences the way individuals react to their environments. However, this aspect of the study of the gene–brain–personality chain has some important implications. For example, the identification of the DRD4 gene may make it possible to initiate early intervention and precautionary measures for at-risk individuals living in stressful environments. A similar case could be made in school environments for children with an elevated risk of ADHD.

Without a doubt, the possible link between an individual's genetic makeup and personality is one of the most exciting and controversial current research topics in the study of personality psychology (Canli, 2006; DiLalla, 2004; Plomin, 2002; Plomin & Crabbe, 2002). You will read much more about this emerging area of research that is at the "cutting edge of personality psychology" in Chapter 8, in which the biological aspects of personality are discussed in greater depth.

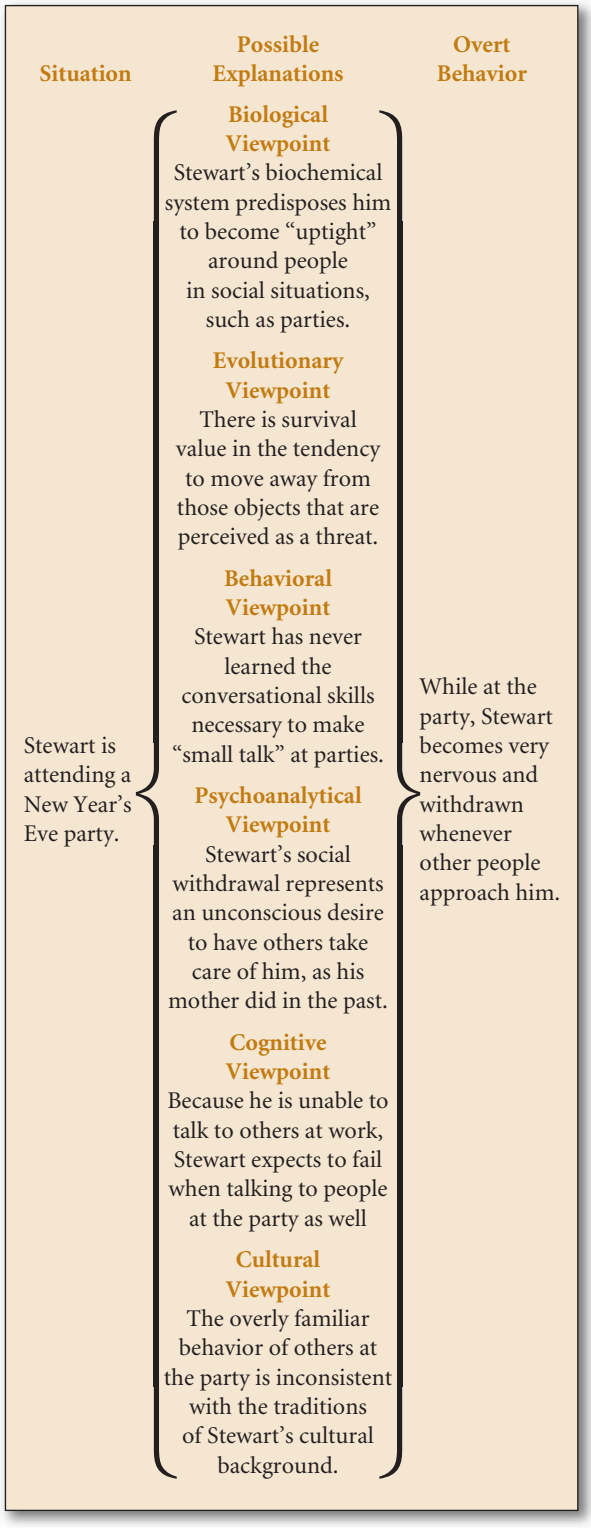


Figure 1.1 Explaining the same overt behavior from six theoretical viewpoints

By contrast, the cross-cultural viewpoint of personality focuses on influences operating outside of the individual – such as societal norms, family expectations, and ethnic identification – to explain the operation and expression of an individual's personality. The material presented in "The Cultural Context of Personality Psychology" exemplifies a cultural explanation.



The Cultural Context of Personality Psychology

Cultural Conceptualizations and Considerations of Personality: Putting Personality in a Worldwide Perspective

Although it is easy to think of individuals as having different personalities, thinking of cultures as having different personalities may be harder. Yet they do. Specifically, North American and Western European countries are characterized by a view of personality that emphasizes the uniqueness of the individual's personality (Brislin & Lo, 2006; Cross & Markus, 1999). Such a viewpoint is seen in the definitions of personality presented on p. 4. These definitions tend to emphasize the principal role of personality as capturing the uniqueness of the individual, predicting what he or she will do, and explaining his or her thoughts, feelings, and behavior.

By contrast, Eastern countries such as Japan, India, and China, along with other Asian cultures, are characterized by a view of personality that places less emphasis on the unique personality of the individual and greater focus on the person's identification with a group, such as family, occupation, or caste, and the expectations, duties, and roles associated with being a member of that group as the principal source for understanding the individual (Brislin & Lo, 2006; Cross & Markus, 1999).

Looking for Love: Personality and Personal Ads

A dramatic example of the variability in cultural expression of personality can be seen in the nature of the information placed in "personal ads" (Cross & Markus, 1999, p. 378). The first two ads shown below

originally appeared in the *San Francisco Chronicle*, a typical daily metropolitan newspaper:

> 28 SWM, 6′1″, 160 lbs. Handsome, artistic, ambitious, seeks attractive WF, 24-29, for friendship, romance, and permanent partnership.
>
> Very attractive, independent SWF, 29, 5′6″, 110 lbs., loves fine dining, the theater, gardening and quiet evenings at home. In search of handsome SWM 28-34 with similar interests.

Now compare these ads with the following two, which were placed on the same day in the *India Tribune*, a California newspaper with a readership of primarily immigrant families from India:

> Gujarati Vaishnav parents invite correspondence from never married Gujarati well settled, preferably green card holder from respectable family for green card holder daughter 29 years, 5′4″, good looking, doing CPA.
>
> Gujarati Brahmin family invites correspondence from a well cultured, beautiful Gujarati girl for 29 years, 5′8″, 145 lbs. handsome looking, well settled boy.

The first two ads reflect the typical Western viewpoint of personality by focusing on the uniqueness of the individual and emphasizing individual personality characteristics (e.g., "independent," "ambitious") and personal interests (e.g., "loves . . . theater, gardening"). The first two ads were placed by the seekers themselves. The second two, on the other hand, were placed by the *families* of the seekers. Note how they reflect the Eastern viewpoint of personality by focusing on information emphasizing group membership, such as indicating the family's region of origin in India (e.g., the state of Gujarat) and the caste of the family (e.g., Vaishnav, Brahmin).

As these ads illustrate, the contrasting expressions of personality in the lives of individuals, from establishing their uniqueness to helping them to attract potential mates, reflects the viewpoint of personality associated with different cultures. Being aware of and sensitive to these cultural characteristics of personality is critical to the efforts of personality psychologists who through their study seek to promote international understanding. Throughout this text you will be exposed to information that will expand your awareness of "the cultural context of personality psychology."



Personality psychologists use certain criteria to assess how much better one theory is than another (Hall, Lindzey, & Campbell, 1998; Levy, 1970). The criterion of *internal consistency* requires that assumptions, principles, and dynamics of a particular theory of personality fit with one another. The more logically the various pieces of the theory fit together, the more favorably it is evaluated. The criterion of *comprehensiveness* focuses on how many aspects of personality (e.g., morality, aggression, and anxiety) are covered by the theory. The more comprehensive a theory, the more favorably it is evaluated. The criterion of **parsimony** suggests, all other things being equal, that the simpler a theory is (e.g., fewer assumptions and principles), the more adequate it is. The criterion of *utility* has to do with how useful the theory is in stimulating additional research, predicting various outcomes, or being applied to different problems (e.g., personnel selection, reducing shyness, and treating depression). Thus, a good theory is internally consistent, comprehensive, simple, and useful.

Personality Research: The Testing of Theory

In addition to developing theories, personality psychologists must test those theories through systematic research involving hypothesis testing. A **hypothesis** is a statement made about the relationship between at least two variables in a manner consistent with a particular theory. For example, a learning theory of aggression might propose the following hypothesis: Viewers who see others rewarded for aggressive behavior will act more aggressively than those who observe others being punished for aggressive behavior. To test the hypothesized effect of observed outcome for aggressiveness on viewer aggressive behavior, a psychologist might have one group of children watch a videotape showing an adult being rewarded for behaving aggressively. At the same time, an equal number of other children would watch a videotape showing the adult being scolded for the aggressive behavior. After watching the videotapes, the children would be allowed to engage in a free-play period while the psychologist monitored the amount of aggressive play through a one-way mirror. Documenting more aggressive behavior in the children who observed the adult rewarded rather than scolded for aggressiveness would confirm the hypothesis and support this learning theory of personality.

Confirming the hypothesis would not mean the research was complete. Subsequent research would need to be done to determine whether such variables as the sex or age of the aggressive adult model or the nature of the reward (e.g., candy vs. verbal praise) made a difference in the children's tendency to imitate the aggressive behavior. Converging evidence from such additional research would more completely test the theory and allow for better understanding of the relationship between observed rewards and imitative aggressive behavior.

Based on additional research, a particular theory of personality is modified and refined to account for the observed results. If the theory cannot be modified to be consistent with the research results, it is usually abandoned and another one is proposed and tested in its place.

Personality Development: The Emergence of Personality

Researchers studying **personality development** examine those factors contributing to the emergence of an individual's personality (Caspi & Roberts, 1999; Costa & McCrae, 1997; Eder & Mangelsdorf, 1997; Halverson & Wampler, 1997; Hayslip, Neumann, Louden, & Chapman, 2006; Lewis, 1999; Pervin, 2002). Examining factors from the past can offer insight into the current state of an individual's personality (Block, 1971, 1993; Caspi, 2000; Caspi & Roberts, 1999, 2001; Roberts & Caspi, 2003). For example, examining such childhood factors as birth order, family size, parenting practices, and early trauma might provide insight into experiences of shyness in adulthood.

Personality development is an interactive process involving other aspects of human development. For example, research indicates that the rate of physical development (e.g., being big or small for one's age) influences personality development during adolescence (Kaplan, 2000; Papalia, Olds, & Feldman, 2001; Shaffer & Kipp, 2007), and these influences on personality development can remain into adulthood (Gross & Duke, 1980). The gradual effect of various physical changes (e.g., slowing down of motor responses) and social changes (e.g., retirement or death of a spouse) on the process of personality adjustment in the later years is also studied by psychologists in the area of personality development (Papalia et al., 2001).

As researchers in the field of personality psychology acquire more knowledge about the factors contributing to the development of certain aspects of personality, they can help individuals make decisions about changing and/or developing certain aspects of their own personality or the personality of others. For example, if certain parenting styles are known to foster high self-esteem (Coopersmith, 1967; Kaplan 2000) or a heightened sense of independence and achievement (Baumrind, 1971; Kaplan, 2000) in children, then deliberately adopting those styles will maximize the likelihood of children developing these personality characteristics.

Personality Assessment: The Measurement of Personality

Personality assessment refers to the development and use of techniques to accurately and consistently measure different aspects of personality (Aiken & Groth-Marnat, 2006; Cohen & Swerdlik, 2002; Lanyon & Goodstein, 1997). Personality assessment is a vital link to the other major aspects of personality psychology. Following are some ways researchers use personality assessment techniques:

- Testing various personality theories (e.g., test anxiety; extraversion vs. introversion).
- Measuring developmental changes in personality (e.g., moral reasoning) from childhood to adulthood.
- Evaluating the effectiveness of various psychotherapies (e.g., a stress-reduction workshop).

Personality psychologists and other professionals also use personality assessment in a variety of important applications to everyday situations, ranging from screening potential job applicants to assisting in the diagnosis of medical problems (Handler & Clemence, 2003).

Applications in Personality Psychology: Putting Personality Psychology to Use

The application of personality psychology involves utilizing what is known about personality theories, research, development, and assessment to help individuals lead happier, healthier, more productive lives. Effective applications of personality psychology have a solid theoretical framework and are based on systematic

research. A long-standing application of personality psychology is to the area of **psychotherapy** – the process of treating maladaptive tendencies using principles of psychology (Trull & Phares, 2001). **Psychotherapists** – those individuals who perform psychotherapy – rely on theories of personality to help guide their thinking about what factors may have caused a client's emotional and behavioral difficulties and what should be done to modify the client's problem behavior. In fact, many major theories of personality and techniques of personality assessment were developed and refined in the context of the personality theorist's clinical experience and research (Sommers-Flanagan & Sommers-Flanagan, 2004). For example, to test her theory that a person's self-esteem will improve as he or she learns to deal successfully with minor failures, a psychotherapist might pose a series of difficult social situations (e.g., starting a conversation with others, asking for a raise at work) to her client and then help guide the individual through the successful resolution of these conflicts, after which the client's self-esteem would be measured and an increase from the beginning of the treatment noted. The results of the research would provide support for the psychotherapist's theory about the relationship between self-esteem and response to failure, as well as increase the likelihood of her using this form of psychotherapy in the future when dealing with other clients who might have similar issues with their self-esteem.

Outside of psychotherapy, the applications of personality research to our daily lives are numerous and diverse.

Medicine, Health, and Epidemiology Personality researchers have examined which personality characteristics are linked with sickness (Contrada & Guyll, 2001) and how certain personality processes might be related to mortality (Danner, Snowdon, & Friesen, 2001), as well as the role personality factors play in the experience and treatment of individuals with chronic pain (Arbisi & Seime, 2006; Gatchel & Weisberg, 2000). In the area of health, researchers have examined the role of personality factors in the progression of HIV (Cole, Kemeny, & Taylor, 1997; DeAngelis, 2002), in the identification and treatment of the "addiction-prone personality" (Barnes, Murray, Patton, Bentler, & Anderson, 2000), and in the expression of high-risk sexual behaviors (e.g., unprotected sex, sex with strangers; Hoyle, Fejfar, & Miller, 2000). In the study of *epidemiology*, the branch of medicine dealing with the frequency of disease in large populations, researchers are investigating the role of personality as a consequential factor in a variety of social problems, including mental disorders, violence, and health-risk behaviors (Krueger, Caspi, & Moffitt, 2000).

Business Research from personality psychology has been used in the process of personnel selection (Butcher, Ones, & Cullen, 2006; Ones & Viswesvaran, 2001; Schmidt & Hunter, 1998). Researchers study employees' effectiveness in diverse occupational settings ranging from sales, telemarketing, and public bus driving (Alge, Gresham, Heneman, Fox, & McMasters, 2002; Furnham, 2001; Von Emster & Harrison, 1998) to such high-risk, hazardous-duty occupational settings as emergency services (e.g., police officers, firefighters, ambulance personnel), nuclear power plants, military units, medical surgical departments, and the airline industry (Flin, 2001). The characteristics of effective and ineffective business leaders and executives have been investigated (Emler & Cook, 2001; Timmerman, 1997). The personality characteristics of those with good organizational citizenship (e.g., customer service orientation and conscientiousness) and those with antisocial organizational citizenship (e.g., substance abuse or violence on the job; theft of money, property, or time from an employer), along with evaluating the tests used to assess them (Avis, Kudisch, & Fortunato, 2002; Graham, McDaniel, Douglas, & Snell, 2002; Nicol & Paunonen, 2002; Sommers, Schell, & Vodanovich, 2002), have also been appraised and identified by researchers utilizing principles of personality psychology (Neuman & Kickul, 1999; Ones & Viswesvaran, 2001).

Technology and Economics Researchers have investigated how individuals judge the personality of others based on information obtained from Internet home pages (Goldstein, 1998) and how they infer personality characteristics from computer-generated synthetic voices (Nass & Lee, 2001), as well as how computer-mediated communication can serve to influence the behavior of shy individuals during online interactions (Stritzke, Nguyen, & Durkin, 2004). In the study of economics, the relationship between personality and entrepreneurship, time spent working, saving patterns, and everyday financial decision making have been examined (Brandstätter, 1997; Carducci & Wong, 1998; Webley, Burgoyne, Lea, & Young, 2001; Wong & Carducci, 1991).

The Law Principles of personality assessment have been used to help in the selection of police officers and in child custody cases (Craig, 2005; Wrightsman, 2001; Wrightsman, Greene, Nietzel, & Fortune, 2002). Knowledge of personality is used in the development of personality profiles of such criminal offenders as rapists and serial killers (Holmes & Holmes, 2002). Input from personality assessment is used to help in courts to determine the issue of a defendant's competency to stand trail (Megargee, 2006), and to assess parents' knowledge and beliefs concerning child-rearing practices when making decisions in child custody cases (Aiken, 2003).

History and the Humanities Within the arts and sciences, personality researchers are studying the dynamics of creativity and genius (Aiken, 2003; Simonton, 1999; Therivel, 1998) and the development of tests to assess creativity (Aiken, 2003). On a darker note, researchers have also investigated the nature and dynamics of the "Nazi personality" (Zillmer, Harrower, Ritzler, & Archer, 1995) in an attempt to understand the individuals who perpetrated such atrocities and the conditions fostering the expression of such a personality, as well as in the interest of preventing the expression of such barbarous personalities in the future. More recently, research in personality psychology has examined personality characteristics of neo-Nazis and individuals involved in other racist and hate groups (Berkowitz, 2005). On the more positive side, researcher have also looked at the personality correlates of those non-Jewish individuals who put themselves at great risk to rescue and provide shelter to Jews being persecuted during the holocaust (Midlarsky, Jones, & Corley, 2005).

As you see, the study of personality psychology has applications to some of the most interesting and important aspects of our lives. To help document the significant contribution personality psychology has made to our everyday living experiences, I will present to you in every chapter of this book special material designed to illustrate the practical utility of what you will be studying in this course. For example, you can read about how the study of personality psychology is being applied to the area of automobile design and advertising in the feature entitled "Applications in Personality Psychology."

Applications in Personality Psychology

How Automobile Design and Advertising Are Being Driven by Personality Psychology: The Personalities of Cars and Their Drivers

Are you what you drive? Automakers are always trying to figure out which factors determine how consumers decide to purchase one car over another. And, most recently, one of the biggest mysteries is how families choose between minivans and sports utility vehicles (SUV). An examination of the two groups by comparing along such standard demographics as median income, age, occupation, family size, or where they live indicates a high degree of similarity, so does little to solve this mystery. However, a look at the personality characteristics of these two groups reveals two distinctively different personality types (Bradsher, 2000; Coomes, 2002).

- *SUV owners: Self-focused type.* SUV owners seem to be less social individuals and more self-oriented people who are concerned with expressing an image of power and sexual allure. Married SUV drivers like the idea that their vehicles could be used for reentering the dating scene. SUV owners are more restless and more attached to luxury and pleasure, have strong conscious or subconscious fears of crime, and are less likely to attend church and do volunteer work.
- *Minivan owners: Other-focused type.* Minivan drivers tend to be more self-confident, outgoing, and more other-focused (e.g., being more involved with their family, friends, and community) and are more likely to attend church and do volunteer work.

Why Drivers Drive What They Do: What Driving Really Means

More than just simply identifying the personality characteristics associated with these two personality types, this information helps to clarify the differences in how members of these groups perceive and interpret the experience of driving. As an example, while both groups indicate that they want to "be in control" when driving their vehicle, it seems to mean something totally different for the two. Specifically, for the "other-focused" minivan respondents, being in control has more to do with safety, such as being able to park and maneuver while navigating traffic and getting elderly individuals and children in and out of the vehicle. On the other hand, for "self-focused" SUV people, being in control has more to do with controlling the situation and the people around them. Reflecting this self-focused personality style, a large-scale survey by an auto-marketing research company in Santa Ana, California, found that SUV buyers were more likely than minivan drivers to place a lower value on displaying courtesy on the road, to agree with the statement that "I'm a great driver," and to indicate that they drove faster than the average motorist. For SUV drivers, according to David P. Bostwick, DaimlerChrysler's director of marketing, "It's not a safety issue, it's aggressiveness, it's the ability to go off the road" (Bradsher, 2000, p. D-4).

Even though such generalizations might not seem meaningful, automakers have spent a considerable amount of money to identify and examine these two personality types, to the extent that this research on personality characteristics has affected the design and marketing of automobiles.

Automobile Design: Creating a Car's Personality

To match the personality characteristics of the self-focused SUV buyer, SUVs are designed to create a "don't mess with me attitude," notes Clotaire Rapaille, design consultant to many major automakers. To meet this desire for control over the environment and others on the road, Rapaille states SUVs are "designed to be masculine and assertive, with hoods that resemble 18-wheel trucks, vertical slats across the grilles to give the appearance of a jungle cat's teeth and flared wheel wells and fenders that suggest bulging muscles in a clinched jaw" (Bradsher, 2000, p. D-4). In addition to having seats mounted higher than those in minivans, SUVs also include a "high-riding" design that allows the vehicles to navigate rough and rugged terrain and to "get them [the drivers] up in the air and make them husky," according to David C. McKinnon, DaimlerChrysler's director of vehicle exterior design (Bradsher, 2000, p. D-4). In sharp contrast, minivans are designed to be more practical (e.g., with storage bins, cup holders, and removable seats) and to have a more attractive interior that will make buyers feel as if they are once again "in the womb," according to McKinnon (Bradsher, 2000, p. D-4).

Advertising Automobiles: Appealing to Personality

The multimillion-dollar advertising campaigns created to market SUVs and minivans are also influenced by the identification of the two different sets of personality characteristics associated with SUV and minivan buyers. Advertisements for minivans tend to reflect the practical nature of the vehicle, with an emphasis on its safety features and on the stream of children getting in and out of it. On the other hand, ads for SUVs tend to stress their "muscular" nature, with an emphasis on the vehicle's power (e.g., engine size) and strength and ability to climb up and over rugged, mountainous terrain.

Thus the scope of personality psychology embraces such common experiences as driving a car as well as such important decisions as buying an expensive car. In addition, it influences multimillion-dollar decisions involving some of the United States' major corporations. The point to be made here is to not only to show you how personality psychology is being used but to illustrate the depth and complexity of its influence. Throughout this book, you will be presented with many more such applications demonstrating the breadth and complexity of personality psychology's influence.

Summing It Up *The Scope of the Study of Personality Psychology*

Area of Study	Brief Description	Related Research Examples
Theory Development	The formulation of theories to help explain and predict various aspects of personality	Is the motivating force behind human behavior striving for superiority or the resolution of unconscious conflict?
Personality Research	The testing of hypotheses based on a particular theory through a program of systematic research	Will individuals with a high score on a measure of test anxiety score lower on a math exam than individuals with a low test-anxiety score?
Personality Development	The investigation of those factors contributing to the nature of personality development across the life span	What personality factors contribute to successful adjustment to aging?
Personality Assessment	The development and utilization of assessment techniques designed to measure different aspects of the human personality	How can you measure a person's level of aggression or self-esteem?
Application of Personality Psychology	The utilization of personality psychology to help individuals and organizations function more effectively	How can physicians use personality tests to diagnose coronary heart disease?

A summary of the major ideas discussed in this section is presented in "Summing It Up: The Scope of the Study of Personality Psychology" above. In the next section, we will examine some of the research methods personality psychologists use to study topics falling with the scope of personality psychology.

Research Methods in Personality Psychology

Personality psychologists use various research methods in studying personality. The three major approaches are clinical, correlational, and experimental (Pervin, 2002). As you will discover in this section, each approach contributes a unique perspective to our knowledge about personality.

The Clinical Approach: Probing the Depths of the Individual

The characteristic feature of the clinical approach is the attention given to the in-depth study of the individual or a small group of individuals. Three methods illustrating the clinical approach are the case study, the individual interview, and the analysis of personal documents.

The Case Study

The **case study method** involves a detailed investigation and description of an individual's history and current status. A comprehensive case history includes information about the individual's past and present family history, educational background, previous history of emotional or adjustment problems, employment record, and medical history. Researchers elicit this valuable information by talking directly to the individual, by interviewing family members, friends, or co-workers, or by gaining access to certain records (e.g., college or employment records). See "A Closer Look" on p. 15 for an example of the kind of information gathered as part of a case study.



A Closer Look

Piecing Together the Picture of a Mass Murderer

What kind of person would do such a thing? Information about past and present circumstances of James Huberty's life, as obtained from acquaintances and assorted records, indicated that:

> The killer, said neighbors, was "a sour man" who regularly exploded in towering rages against his wife Etna and their two daughters, 14 and 10. Even the bumper sticker on his car was testy: "I'M NOT DEAF, I'M IGNORING YOU." (*Time*, July 30, 1984, p. 91)

Acquaintances in Ohio were not altogether surprised.

One said, "I knew there was something wrong with him."

Another recalled that when Huberty lost his job at the Babcock & Wilcox plant in nearby Canton, "He said that if this was the end of his making a living for his family, he was going to take everyone with him. He was always talking about shooting somebody."

A portrait of Huberty, drawn from law enforcement officials and those who knew him, reveals an uncertain man who shifted directions several times in his life. One personality trait was consistent, however. Huberty struck others as a loner who did not much like people.

In Canton, Ohio, Brother Dave Lombardl, minister of the Trinity Gospel Temple, said he believed Huberty's problems went back to childhood, when the boy's mother deserted the family to become a religious missionary to an Indian reservation. Huberty grew up in Ohio, raised mainly by his father, Lombardl said.

"He had real inner conflicts," said Lombardl, who performed the marriage ceremony for Huberty and his wife in 1965. "He was pent-up; he was a loner, and he had kind of an explosive personality. When you talked to him, you knew he had nervous anxiety and was wound up inside."

In 1964 and 1965, while attending Malone College in Canton part-time, Huberty became an apprentice mortician at Don Williams Funeral Home.

"He was a very clean-cut chap and he was more or less of a loner type," Williams recalled yesterday. "He would rather just be off by himself."

Williams said Huberty was better at embalming bodies than dealing with clients. "I told him that I thought he was pursuing the wrong profession. He didn't seem to have the personality for it," Williams said.

Huberty married the former Etna Markland during this period, Williams said, and the couple had two children.

In the 1970s, Huberty appeared to achieve some success. He graduated from Malone with a bachelor's degree in sociology after on-again, off-again study there. He went to work as a welder for Babcock & Wilcox, reportedly making $25,000 to $30,000 a year.

He moved to Massillon eight years ago and bought a home and a six-unit apartment building next door, according to James Aslanes, a coworker at Babcock & Wilcox.

Aslanes got to know Huberty there but, before very long, he became wary of him.

"We first became friendly when he found out I was studying kung fu," Aslanes recalled. "He was inquiring about how to 'put his daughter into the program' for some kind of self-defense."

The two men visited each other's homes. Aslanes, a gun owner himself, noticed that Huberty's house was filled with guns: shotguns, rifles, handguns and an Israeli-made Uzi machine gun. While Aslanes said their mutual interest reinforced their friendship, one incident caused him concern.

"We went shooting one time with the Uzi," he said, "and he began shooting at a rock. It was dangerous. The bullets might come back to us. It shocked me that anybody that knowledgeable about guns would do that."

When Huberty was laid off in October 1982 after 10 years' employment, Aslanes said he became concerned about making his house payments.

"He became despondent," Aslanes said. "He worried. He blamed the whole country for his misfortune. He said that Ronald Reagan and the government were conniving against him. The working class were going to have to pay for this inflation. . . . He became so discouraged that he wrote the Mexican government and applied for residence. . . .

"He bought a lot of food, survival foods. He had tons and tons of ammunition, and when he left Massillon, I was under the impression that he was going to Mexico, a couple of miles south of Tijuana."

Huberty was well-known to Massillon police, although he was never charged with a violent crime. Sgt. Don Adams recalled that Huberty's two German shepherds repeatedly harassed motorcycle police.

When calls came in on minor matters, Adams recalled, officers often joked that it was "the Hubertys again" because of the numerous complaints that Huberty filed against others and the complaints filed against him. Adams said Huberty once was accused of shooting a dog with an airgun.

In October, 1980, Massillon police charged Huberty with disorderly conduct after a neighborhood quarrel.

In September 1981, neighbors accused Mrs. Huberty of threatening them with a 9mm pistol; she later pleaded guilty to a disorderly conduct charge, Massillon police said.

Huberty took his family to Southern California seven months ago. San Diego neighbors described Huberty as an angry, unsmiling man.

Although he had recently lost his job, Huberty did not fit the profile of the classically unemployed, according to neighbors. They described the family as well-clothed and Huberty as a clean-cut dresser, "like an executive."

Police officials said Huberty showed up at the restaurant wearing camouflage trousers. According to those who spoke of him yesterday, he had never been seen in such garb before.

Although Huberty's wife was quoted as saying he liked children, some neighbors said he hated them and people of Mexican descent. The massacre at the restaurant, a neighborhood gathering spot, took a heavy toll of both groups. (*The Courier-Journal*, July 20, 1984, p. A-12)

From Huberty's father and widow, we get some additional information:

SAN DIEGO – Adding depth to the portrait of mass murderer James Oliver Huberty, his father and widow have described him as a troubled, hot-tempered man who was often abusive to his family and once tried to kill himself.

Earl V. Huberty said Friday that a combination of medical problems and an unsuccessful career left his son "angry at the whole world." A clinical psychologist who sat in on an interview Thursday with Huberty's widow described the slayer's actions on his final day as a "grandiose last stand."

In an interview with the San Diego Union published Friday, Mrs. Huberty, 41, recalled that last year, when the family still lived in Ohio, her husband tried to kill himself.

She wrested the gun away and hid it, she said, adding, "When I came back, he was sitting on the sofa crying."

She told the newspaper that a couple of months ago, Huberty said, "You should have let me kill myself." (*The Courier-Journal*, July 22, 1984, p. A-10)

Mrs. Huberty said in the interview that her husband "would never have done this . . . if he had been in his right mind."

"If he . . . hadn't been hearing voices . . . I know definitely he would never have killed a child," she said. "He was very fond of children, extremely fond of children, and he always talked very vehemently about what should happen to people that hurt children." (*The Courier-Journal*, July 20, 1984, p. A-1)

While obtaining information from these various sources does give some understanding of what past and present social and emotional factors may have contributed to this incident, they make possible only "educated guesses":

Lt. Paul Ybarrondo, commander of the San Diego Police Department's homicide squad, said investigators had not determined a motive for the killings.

"I don't expect that we will," Ybarrondo said. "You're talking about getting into a deceased person's thought process. We might be able to come up with something in his background. . . . But as far as why he went over the brink at this very moment, I can't answer that, and I don't think we'll ever be able to." (*The Courier-Journal*, July 20, 1984, p. A-1)

Under such conditions, educated guesses seem to be better than nothing. But for more concrete answers, additional systematic research involving in-depth analyses of the case studies of other mass murderers is required. For example, personality researchers can begin to compare case studies of other mass murderers in an attempt to identify common personality characteristics (e.g., violent tendencies), underlying dynamics (e.g., pent-up rage), and life circumstances (e.g., feelings of alienation). Based on the identification of these common features, a theory could be developed and tested on other violent individuals (e.g., highly violent prisoners). In this case, a researcher might test a theory linking an excessive hormonal imbalance and feelings of alienation with the behavior of violent inmates. If such a link were found, an application of this research might be the development and implementation of a treatment program that combines the use of medication to deal with the hormonal imbalance, and teaching of communication skills to reduce feelings of alienation. Finally, an evaluation of the treatment program would also serve as an additional test of the proposed theory.



Documenting rare phenomena and helping to test theory are other important functions of the case study. Presenting a detailed case study of the successful treatment of a person with a rare form of dissociative identity disorder (previously referred to as multiple-personality disorder or simply multiple personality), in which the individual displays two or more complete and

separate personalities (e.g., a timid 7-year-old girl and an abusive 60-year-old man) without being aware of it, can help to document the existence of the disorder. Beyond just demonstrating the disorder's existence, a thorough case study can also provide support for testing the theory upon which the treatment is based, such as using hypnosis to help the individual to become aware of and integrate the different personalities. Such results would then encourage additional research, with a larger number of other individuals suffering from dissociative identity disorder being treated at different hospitals to test this theory.

The Individual Interview

The **individual interview** is a one-on-one verbal exchange for the purpose of obtaining important information about the interviewee. The general format is for one individual to ask a series of specific questions of another designed to elicit responses that will provide information for the purpose of addressing a particular issue. For example, after giving a client a series of personality tests, the career counselor begins to ask the client questions about the conditions under which she would like to work (e.g., "Do you like predictability or unpredictability in your workday?") in an attempt to match the results of her personality tests (e.g., high conscientiousness and moderate impulsiveness) with specific occupations (e.g., pharmaceutical sales representative – highly predictable workday – vs. emergency medical technician – very unpredictable workday). However, there is more to an individual interview than just asking and answering questions. Conducting a successful interview involves establishing rapport and considering both verbal and nonverbal communication.

- *Establishing rapport*. **Rapport** refers to the positive, warm relationship established between the interview participants. Establishing rapport makes the expression of intimate and oftentimes very painful information much easier. Refraining from expressing disapproval or from appearing judgmental of the individual's responses and offering confidentiality are effective ways to establish rapport.
- *Nonverbal behavior*. In addition to the verbal message and variety of verbal cues, a skillful interviewer is also sensitive to the individual's nonverbal messages (e.g., posture, gestures, and facial expressions). Subtle changes in the individual's nonverbal messages can help provide more information about the true meaning of the verbal message.

To help illustrate these points, "A Closer Look," below, examines the dynamics involved in an individual interview.



A Closer Look

Interview with a College Student: Sometimes Talking About It Can Help

The following excerpt illustrates many basic features of the individual interview, such as establishing rapport and the progressive "opening up" of the individual to the interviewer. This typifies an initial interview at a university psychological clinic with a student who is burdened by parental pressures, deciding on a major, test anxiety, and alcohol consumption. The comments presented opposite the dialogue are included to clarify the interviewer's objectives and to identify the significant topic being explored.

As you have seen, a considerable amount of personal information about the nature of the individual's problems at school was obtained by asking the right question at the right time. If performed appropriately, the individual interview is a very useful tool. As a side note, if you are having any personal concerns that are troubling you, consider seeking assistance from your school's counseling center because, as the subtitle of this box indicates, "sometimes talking about it can help."

Interview Dialogue	Comments
INTERVIEWER (I): Could you tell me why you decided to come to our clinic today?	Interviewer highlights significance of client's choice to come to the clinic at this particular time.
CLIENT (C): Well, I'm having real difficulties in school.	
I: OK I'd like to briefly explain what I hope we can accomplish in the next hour, to give you a clear idea of what to expect and how this interview can help you.	Interviewer provides basic goals and guidelines to reduce the client's uncertainty and to promote positive expectations.
Maybe we could start by talking about how you decided to come to come to the clinic at this particular point in your life.	Open-ended question, but with a focus of "why now?"
C: I can't have my way. My parents won't let me.	
I: Your parents have a powerful and hurtful impact on you. I hear you very clearly. I'm just wondering what you'd do if you could magically have control of your own future?	Acknowledges client's belief, but challenges the hopelessness. Facilitates exploration of alternatives.
C: Well, I guess I'd change my major to theatre, that's where my interests and talents are.	
I: I'd like to explore that, but first, let's get a picture of what it's like to be in your family. Could you describe your family, and how you fit it?	Holds off on specific issues, to get a general background.
(after some discussion about 20 minutes into the session)	
I: Tell me about your relationships with friends, including both casual and close friends of both sexes.	Exploring social relationships.
C: Well, I'm afraid I'll flunk out of the university if I don't get over feeling anxious about tests (begins to clasp hands nervously and blushes while looking at the ground, some light laughter also).	Nonverbal cues reflecting anxiety.
I: I notice that you seem to be worried. Troubles at school can really be painful.	Gentle acknowledgment of client's nonverbal cues and distress.
C: Especially when your parents are pressuring you to get into law school.	An important tie-in: the family plays a role as well as school problems.
(after some discussion about 15 minutes later)	
I: Well, you've given an excellent sketch of several important areas in your life. Have we missed some important sides of you or your situation?	Relying on client to fill in gaps.
C: I don't know if it's relevant, but I'm concerned about how much I've been drinking lately.	Another important life concern.
I: Why don't you tell me more about it.	
(after some discussion about 15 minutes later)	
I: We may not have covered everything, but I'd like to use our remaining time to summarize my understanding of you and your situation, and then to have us both discuss what you might do next.	Acknowledges that more information may still be needed, but makes sure to provide a summary and a discussion of the client's alternatives.

(Adapted from Kendall & Norton-Ford, 1982, pp. 209–211)



Analysis of Personal Documents

A third research method characteristic of the clinical approach is the analysis of personal documents. According to Allport (1961), a **personal document** is "any freely written or spoken record that intentionally or unintentionally yields information regarding the structure and dynamics of the author's life" (p. 401). Personal documents include diaries, letters, autobiographies, and verbatim recordings. For a closer look at some excerpts taken from personal documents, read the feature "A Closer Look" below.



A Closer Look

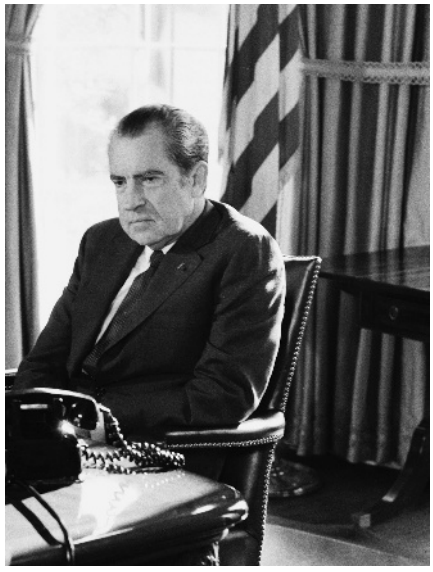
Words from the Heart: Excerpts from the Personal Documents of President Nixon's Public and Private Farewell Speeches

In what is considered to be the lowest point in the history of the presidency of the United States, on August 9, 1974, the 37th president, Richard Nixon, became the only person in U.S. history to resign the nation's highest office. He did so because of his personal knowledge of the burglary of the Democratic headquarters in the Watergate Hotel, his efforts to cover it up, and his attempts to obstruct a subsequent investigation into the incident by the FBI. At the time of his resignation, Nixon was probably one of the most reviled figures in the United States.

What would make a man do such things? What was his personality like? How might the study of personality psychology help us answer these questions? A possible answer might come from conducting a **psychobiography** – that is, a detailed psychological case study of an individual (Elms, 1976, 1994). In his book *Personality and Politics*, Alan Elms (1976) illustrates how psychobiographies have been used to study the personality of famous politicians. In a discussion of the psychobiographies of President Nixon, Elms notes that:

> Nixon's formal statement of resignation from the Presidency was a calm and controlled performance. . . . It could almost have been the retirement speech by a respected President turning over the reins to his elected successor, or perhaps a State of the Union oration designed to comfort more than inform. It certainly





In sharp contrast to his public appearance, Nixon's private appearance when alone was very somber and projected a sense of weakness and defeat.

> informed the audience very little about Nixon's internal state. (p. 103)

In contrast, in his farewell speech to his staff, "with sweat and tears streaming down his face" (Elms, 1976, p. 103), Nixon seems to have been speaking words from the heart. During a more emotional part of his speech, Nixon remembers his mother:

> Nobody will ever write a book about my mother. Well, I guess all of you would say this about your mother: my mother was a saint. And I think of her two boys dying of tuberculosis, nursing four others in order that she could take care of my older brother for three years in Arizona and seeing each of them die. And when they died it was like one of her own. Yes, she will have no books written about her. But she was a saint. (p. 103)

In his closing remarks, Nixon becomes philosophical:

> Because the greatness comes not only when things go always good for you, but the greatness comes when you're really tested, when you take some knocks and some disappointments, when sadness comes. . . . Always give your best. Never get discouraged. Never be petty. Always remember, others may hate you, but those who hate you don't win unless you hate them. And then you destroy yourself. (p. 104)

Bruce Mazlish (1973), in his rather detailed psychobiography of Nixon, emphasized many of the themes noted in his speeches as a means of identifying some of the major influences on the characteristics of Nixon's personality. For example, according to Mazlish, Nixon's "Protestant ethics" traits – emphasizing planning, hard work, and persistence – were influenced by his mother and maternal grandmother. On the other hand, an analysis of the personal recording made in his office revealed that his good qualities – intelligence, determination, a desire for world peace – were overtaken by more base elements of his personality – doing whatever needed to be done, no matter how dishonest, to achieve his goals and to humiliate and destroy his opponents and perceived enemies (Commire, 1994).

Information from such personal documents made possible some insights into Nixon's private personality not seen in public. Such personal insights reflect the real heartache and disappointment Nixon felt, as well as demonstrating his sense of vulnerability and sentimentality, which the most powerful leader in the free world had to hold in check when projecting a brave, bold front while appearing on the world stage. When he could let his guard down, Nixon's personality was less a reflection of extreme public power than one of defeat and, both literally and metaphorically, resignation.

Finally, as you will see throughout this book, psychobiographies have helped us understand how life events served to shape the personalities not only of politicians and other historical figures but also of many famous personality psychologists, as well as other influential psychologists, and the viewpoints of personality they expressed in their work (Runyan, 2006). For a good general introduction to the use of psychobiographies to gain insights into the work of many famous psychologists, see Runyan's (2006) article, "Psychobiography and the Psychology of Science: Understanding Relations between the Life and Work of Individual Psychologists."



Achieving an in-depth understanding of an individual's feelings and behavior involves much more than simply reading personal documents. As Allport (1961) notes, "Anyone, of course, can read these documents and form interpretations in a common-sense way" (p. 406). To go beyond common sense, researchers in personality psychology might conduct a content analysis of the document. A **content analysis** is a systematic assessment of the themes, ideas, and expressions presented in a document. In one form of content analysis, a researcher can identify the major overlapping themes by asking different raters to read the document and indicate what themes they observe. The "Applications in Personality Psychology" feature on p. 21 illustrates how the content analysis of personal documents is used to help increase our understanding of one of the most tragic examples of human suffering – suicide.

Applications in Personality Psychology

Closing Statements: Content Analysis of Suicide Notes

Psychologists and other mental health professionals cannot currently explain why people commit suicide. But researchers continue to analyze the contents of suicide notes in an attempt to better understand the motives and feelings of those who kill themselves (Leenaars, 1989: Lester & Linn, 1998; Stirman & Pennebaker, 2001). For example, Stirman and Pennebaker (2001) compared approximately 300 poems by 9 suicidal and nonsuicidal poets and found that the writings of the suicidal poets used more first-person singular references (e.g., *I*, *me*, *my*), supporting the notion that suicidal individuals are more socially detached from others and preoccupied with the self. In a very early and important study, Tuckman, Kleiner, and Lavell (1959) attempted to investigate more directly the writings of suicidal individuals by examining the suicide notes left by some. More specifically, of the 724 suicides examined, they found that approximately 24 percent left notes. Analyzing their content revealed four general emotional categories: positive, negative, neutral, and mixed affect.

- *Positive emotional content*. Fifty-one percent of the notes express what might be defined as positive affect, such as expressing affection, gratitude, and concern for others:

  > Please forgive me and please forget me. I'll always love you. All I have was yours. No one ever did more for me than you, oh please pray for me please. (p. 60)

- *Negative (hostile) emotional content*. Only 6 precent of the notes were classified as expressing primarily hostile or negative affect:

  > I hate all of you and all of your family and I hope you never have peace of mind. I hope I haunt this house as long as you live here and I wish you all the bad luck in the world. (p. 60)

- *Neutral emotional content*. Twenty-five percent of the notes contained a generally neutral affective tone. As you read the following note, notice it conveys neither a sense of anger nor a sense of relief, just a sense of order:

  > To Whom It May Concern,
  >
  > I, Mary Smith, being of sound mind, do this day, make my last will as follows – I bequeath my rings, Diamond and Black Opal to my daughter-in-law, Doris Jones and any other personal belongings she might wish. What money I have in my savings account and my checking account goes to my dear father, as he won't have me to help him. To my husband, Ed Smith, I leave my furniture and car.
  >
  > I would like to be buried as close to the grave of John Jones as possible. (Darbonne, 1969, p. 50)

- *Mixed emotional content*. Eighteen percent of the notes were classified as having a mixed emotional content, containing a combination of both positive and negative affect:

  > I am sorry I have to take this way out. But you can see there's no other way. She would just give me and the kids a hard time for the rest of our lives, also the club deal is away out of my hands. Contact. S——— about the Girls and the M———s about B———. All the money I have in the world is here. May God Bless you and your family and may he look after mine.
  >
  > May she rot in hell after me. (Tuckman et al., 1959, p. 60)

Information gained from such content analysis is used to test theories of suicide, assess others' reactions to it, and help individuals working with suicidal persons in such places as mental hospitals, counseling centers, and suicide intervention telephone centers (Comer, 2001).

Evaluating the Clinical Approach: Strengths and Limitations

Being aware of the characteristic strengths and limitations of the clinical approach will make evaluating its use easier.

Following are some strengths of the clinical approach:

- *In-depth understanding of the individual.* A major strength of the clinical approach is that it offers several ways of studying a particular individual or small group of individuals in considerable detail. An example is studying the personality development of female state governors in the 20th century.
- *Studying development and adjustment processes over time.* Taking an in-depth look at an individual over time makes it possible to observe developmental changes and their presumed effects (Funder, Parke, Tomlinson-Keasey, & Widaman, 1993). An example is a therapist examining changes in a client's self-esteem and job satisfaction over a two-year period.
- *Investigating extreme and rare events.* Studying extreme and rare events is made possible with the clinical approach. As an example, investigating the coping skills of survivors of a murderous prisoner-of-war camp makes studying the extremes of personality adaptability possible. Because they are so rare, such events must be studied when they can be found, and in as much depth as possible.

The following are some limitations of the clinical approach:

- *Limited generalizability.* The issue of **generalizability** involves extending the findings about one group of individuals to another group. Findings based on the clinical approach typically use a small number of individuals, which limits their extension to other groups. For example, it is unclear how information about the coping skills of a handful of prisoner-of-war camp survivors may be generalized to the development of a survival training program taught to thousands of other soldiers.
- *Personal biases.* The personal nature of the clinical approach introduces subject and researcher biases.

  Subject biases are systematic alterations in the recall of an individual when reporting information to a researcher. Subjects may withhold information out of embarrassment or "fill in the gaps" of distant events.

  Researcher biases are tendencies to gather and interpret information in a manner consistent with the researcher's point of view. For example, a researcher testing a theory of sibling rivalry may overemphasize the role of siblings when studying the personality development of U.S. presidents.

Thus, the clinical approach provides a variety of methods for in-depth study of individuals or a small group of individuals. A summary of the main points discussed in this section is presented in "Summing It Up: Characteristic Methods of the Clinical Approach" and "Summing It Up: Characteristic Strengths and Limitations of the Clinical Approach" opposite. In the next section, you will examine the correlation approach in the study of personality psychology.

The Correlational Approach: Knowledge by Association

As we have seen, the clinical approach provides insights into the personality of an individual or a very small number of individuals by identifying important personality variables. By contrast, the major purpose of **correlational research** is to investigate the extent to which any two variables are associated with one another. For example, a researcher might be interested in studying the relationship between shyness and loneliness or the need for achievement and worker productivity.

The Scatter Plot: Illustrating Relationships

A **scatter plot** is a graph summarizing the scores obtained by many individuals on two different variables. Figure 1.2a is a scatter plot showing the relationship between scores on a measure of shyness and a measure of loneliness. Each point on the scatter plot represents an individual's score for the two different variables. For example, the point on the scatter plot corresponding to Mike's scores indicates a score of 12 on the measure of loneliness and 20 on the measure of shyness. Interpreting correlational relationships involves identifying the direction and strength of the relationship between the two variables.

Summing It Up *Characteristic Methods of the Clinical Approach*

Method	Function	Application
Case Study	Provides a comprehensive investigation of past and present factors contributing to the behavior of an individual or small group of individuals	By talking with other members of the Native American tribe, the cultural anthropologists began to develop a profile of the social skills and personality qualities used in the selection of the tribe's chief.
Individual Interview	Obtains personal and vital information about an individual through systematically asking questions within an environment designed to elicit trust and cooperation in the individual answering the questions	During an interview, the potential military recruit expresses views about wanting to join the military to deal with her feelings of inadequacy and to rebel against what she considered as too much control over her personal and social life by her parents.
Analysis of Personal Documents	Yields information about the personality of a particular individual through the systematic analysis of information found in such personal documents as letters, speeches, stored files, and records	Looking at the records of the chat-room discussions stored on the computer of the high school shooter indicated a desire to please others, feelings of rejection, loneliness, and hate, and a history of interests in guns and playing violent video games.

Summing It Up *Characteristic Strengths and Limitations of the Clinical Approach*

Factor or Process	Strength or Limitation	Description
Understanding of the individual can be in depth	Strength	Various techniques are available to facilitate detailed study of research participants.
Developmental processes can be studied over time	Strength	Developmental changes in participants' thoughts and behaviors can be monitored and predicted.
Extreme and rare events can be investigated	Strength	Unusual phenomena can be illustrated and documented.
Limited generalizability	Limitation	Typically small sample sizes limit researchers' ability to generalize findings to larger or more diverse groups.
Personal bias	Limitation	Individuals may distort findings via selective reporting of information; researchers may distort findings via their own interpretations.

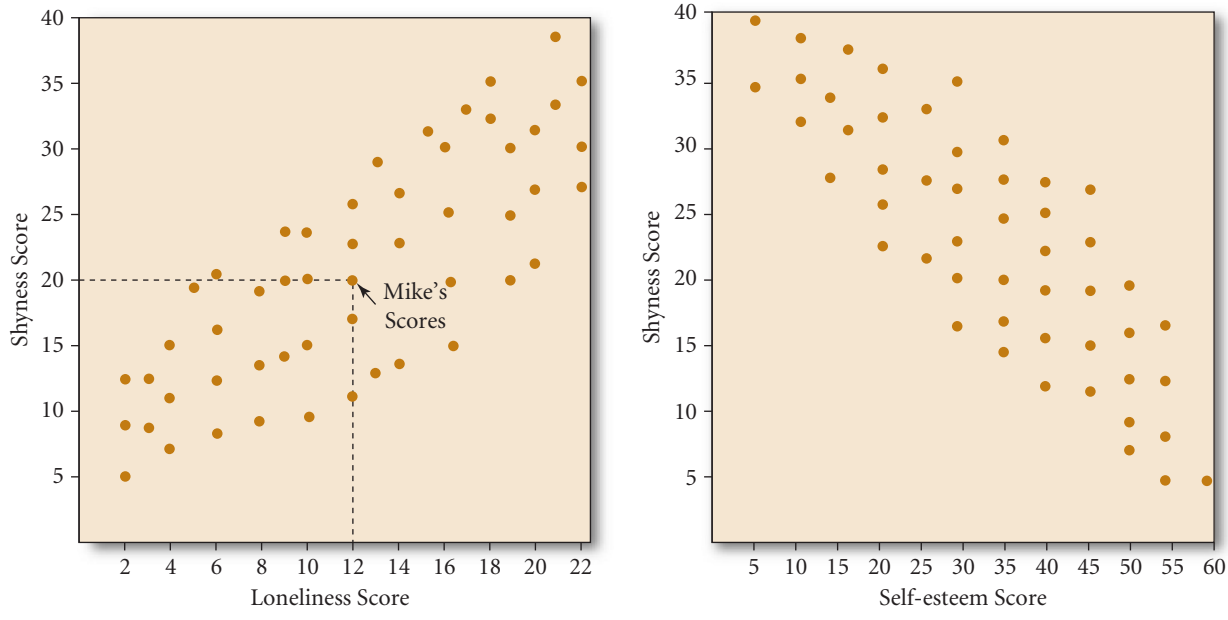


Figure 1.2 Scatter plots illustrating a positive and negative correlational relationship

Correlational Relationships: Identifying Associations

The direction of a correlational relationship reveals how the two variables are related. The two basic patterns indicating direction are the positive and negative correlational relationships. The general pattern of association of a **positive correlational relationship** reveals that as the scores on one variable increase, the corresponding scores on the other variable also tend to increase. Figure 1.2a shows that as the loneliness scores increase, the corresponding shyness scores also tend to increase. The general pattern of association of a **negative correlational relationship** reveals that as the scores on one variable increase, the corresponding scores on the other variable tend to decrease. Figure 1.2b shows that as the shyness scores increase, the corresponding self-esteem scores tend to decrease.

The Correlational Coefficient: Assessing the Strength of the Correlational Relationship

After determining the direction, the next step is to assess the strength of the correlational relationship by determining the extent to which scores on the two variables are related. The index used to indicate the strength of association between two variables is called the **correlation coefficient** and is symbolized by the letter *r*. The strength of the association between two variables is reflected in a value ranging from $r = +1.00$ to 0.00 to -1.00 and is determined by a specific statistical formula. The closer to +1.00 or -1.00 the value for *r*, the stronger the association between the two variables. In a similar manner, the closer to zero the value of *r*, the weaker the association between the two variables.

The strongest relationship possible between two variables is $r = +1.00$ or -1.00. Figure 1.3a indicates that there is a perfect positive correlational relationship ($r = +1.00$) between the scores on measures of aggressiveness and hostility. Figure 1.3e indicates that there is a perfect negative correlational relationship ($r = -1.00$) between a measure of shyness and a popularity rating. In a perfect positive correlation, the value for one variable is associated with one and only one value of the second variable, creating a straight line on the graph. As will be discussed in more detail below, the correlation between two variables does not mean that one variable *caused* the changes in the values of the other variable, only that the changes in values are related.

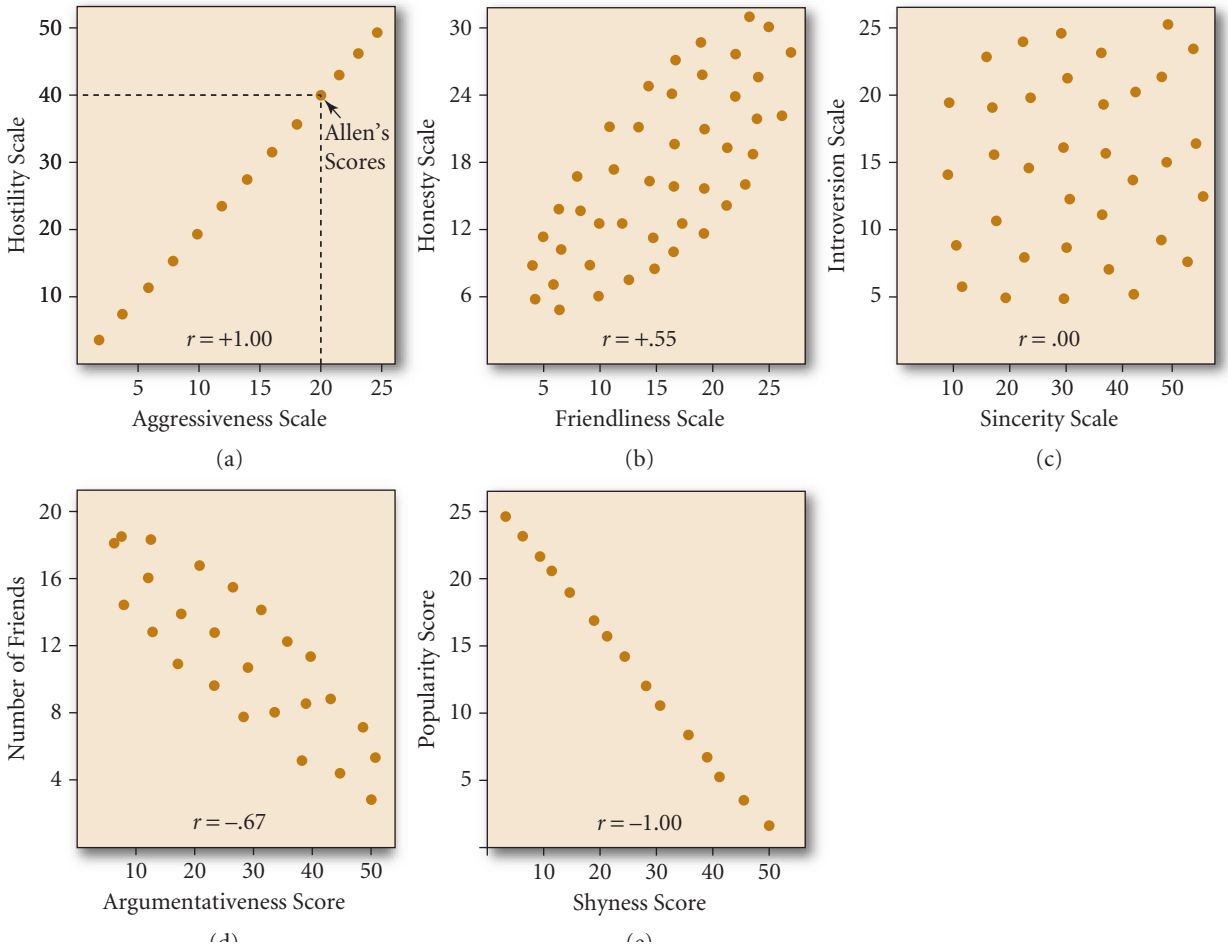


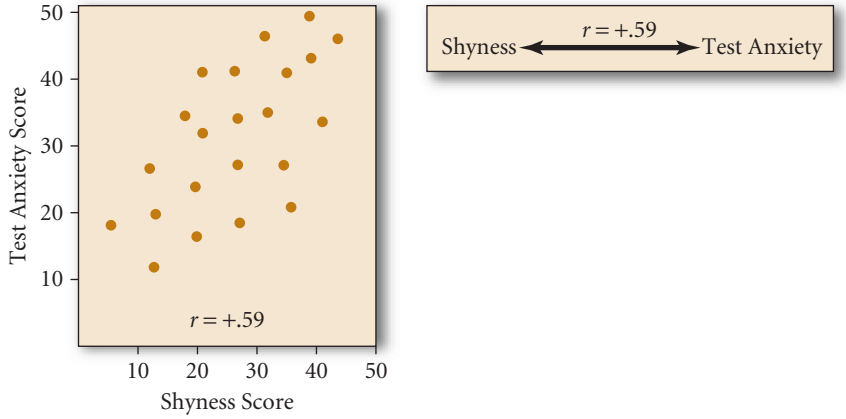
Figure 1.3 Scatter plots illustrating the strength of the correlation for five proposed relationships

Perfect correlational relationships in personality research are extremely rare. A less-than-perfect correlational relationship indicates that a particular score on one variable is not necessarily associated with one and only one value on the second variable, creating some spread in the scores in the scatter plot. Figure 1.3b is an example of a moderately strong positive correlational relationship (r = +.55) between friendliness and honesty. Figure 1.3d is an example of a moderately strong negative correlational relationship (r = –.67) between argumentativeness and number of friends.

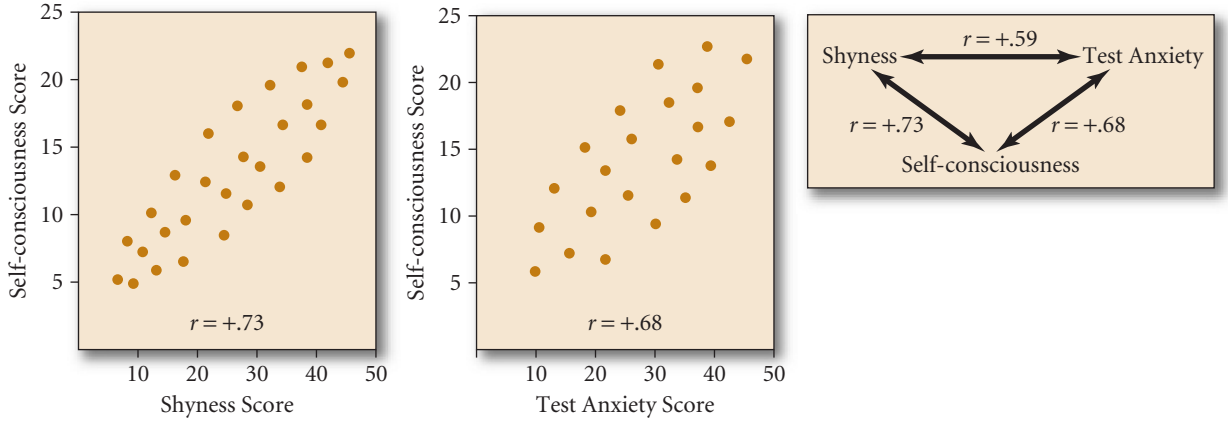
The scatter plot in Figure 1.3c illustrates an uncorrelated relationship (r = .00) between scores on measures of sincerity and introversion. In uncorrelated relationships, the association between the two variables is extremely weak or nonexistent. In assessing the strength of a correlational relationship through visual inspection, a general rule of thumb is the less spread in the scores on the scatter plot, the stronger the relationship.

The Third-Variable Problem: Looking Beyond the Observed Relationship

Interpreting correlational relationships is made difficult by the potential presence of third variables. The **third-variable problem** exists when the observed relationship between two variables is actually produced by their relationship with another unobserved, or third, variable. Figure 1.4a illustrates a relationship between shyness and test anxiety. Figure 1.4b illustrates how this relationship is explained by considering the relationship of these two variables to a third variable – self-consciousness.



(a) A proposed relationship between shyness and test anxiety



(b) A proposed relationship between shyness, test anxiety, and the third variable of self-conciousness

Figure 1.4 An illustration of the third-variable problem, (a) A proposed relationship between shyness and text anxiety, (b) A proposed relationship between shyness, test, anxiety, and the third variable of self-consciousness

Interpreting correlational relationships involves considering the direction and strength of the relationship and the third-variable problem.

Evaluating the Correlational Approach: Strengths and Limitations

An understanding of the correlational approach also involves considering its strengths and limitations. The following are some characteristic strengths of this approach:

- *Exploring and identifying relationships.* An important use of the correlational approach is in searching for relationships among variables during early stages of research. A personality psychologist might first explore the relationship of shyness with such variables as self-esteem, social anxiety, self-consciousness, and loneliness to determine the strongest correlations and the best research potential.
- *Ethical considerations.* Using the correlational approach, researchers can investigate some important problems that they could not ordinarily study because of ethical restrictions. For example, it is not ethically permissible for a researcher to separate children from their parents in order to study personality development in single-parent families. But it is possible to correlate information about personality variables

by studying children who are already in single-parent families.

Here are some characteristic limitations of the correlational approach:

- *The third-variable problem*. The possibility of third variables going unidentified by the researcher decreases a thorough understanding of the relationship between two variables. But being aware of potential third variables and taking them into consideration can minimize their negative impact.
- *Undetermined causal relationships*. While the correlational approach can identify the nature and strength of the relationship between two variables, this does not mean that one variable causes the change in the other to occur. For example, in the relationship between shyness and self-esteem (see Figure 1.2b), it is not known whether shyness causes people to have low self-esteem or having low self-esteem causes people to be shy. Unfortunately, the results from such a correlational study do not tell researchers which explanation, if either, is correct. This is a serious limitation, since the goal of most personality research is to explain why the human personality operates as it does.

Thus, the correlational approach makes it possible to study the nature and the magnitude of the relationship between two variables of interest to personality psychologists. A summary of the main points discussed in this section is presented in "Summing It Up: Characteristic Features of the Correlational Approach" opposite, and "Summing It Up: Characteristic Strengths and Limitations of the Correlational Approach" on p. 29. In the next section, you will examine the experimental approach to the study of personality psychology.

The Experimental Approach: Knowledge by Systematic Intervention

The correlational approach can determine the degree to which two variables are associated, but not the causal nature of the relationship. Personality psychologists searching for causal relationships pursue knowledge by systematic intervention using the experimental approach.

Basic Principles of the Experimental Approach: Intervention, Observation, and Control

The **experimental research** approach requires three elements: intervention, observation, and control. The logic of the approach involves investigating how the systematic intervention of one variable creates changes that can be observed in a second variable. At the same time, researchers attempt to control for outside factors that might also produce changes in the second variable.

Systematic Intervention Establishing a causal relationship involves determining that varying the level of one variable produces corresponding changes in a second variable. The **independent variable** is the factor that you believe causes the change in the second variable. For example, psychotherapists might wish to investigate how receiving positive comments causes changes in the self-esteem of clients. They divide 30 clients into three groups of 10 with the first group receiving five positive comments per 1-hour session, the second receiving 20 positive comments, and the third receiving no positive comments. The independent variable is the number of positive comments.

Observation The behavior affected by the independent variable and being observed is called the **dependent variable**. The dependent variable in this example is the change in the clients' self-esteem. Figure 1.5 summarizes the changes in the clients' self-esteem by plotting the **group mean** (i.e., arithmetic average) of the self-esteem scores for each of the three feedback groups.

Experimental Control **Experimental control** refers to the extent to which researchers control for the possibility that other explanations may account for the results observed. There are many ways to increase experimental control; following are three of the most common:

- *Randomly assigning subjects*. Decreases in experimental control occur whenever there is the possibility of bias in the way researchers assign individuals to different conditions of the experiment. **Random assignment** is a procedure designed to help control for biases in selection. According to the principle of random

Summing It Up *Characteristic Features of the Correlational Approach*

Characteristic Feature	Description	Example
Types of Correlational Relationships	A scatter plot provides a visual representation of the nature of the relationship between two variables.	A researcher looks at the relationship between test anxiety and test performance.
Positive Relationship	As the value of one variable gets larger, the corresponding value of the second variable shows an increase.	As scores on the measure of test anxiety get higher, heart-rate scores of the students also get higher.
Negative Relationship	As the value of one variable gets larger, the corresponding value of the second variable shows a decrease.	The higher the score on the measure of test anxiety, the lower the grade the students believe they will obtain on the math test.
Uncorrelated Relationship	As the value of one variable changes, there is no systematic pattern in the change of the second variable.	There is no identifiable pattern of change between the scores of test anxiety and friendliness.
The Correlation Coefficient	A numerical value indicates the strength of association between two variables.	The correlation coefficient of the relationship between self-esteem and loneliness is rather low.
The Index of the Correlation Coefficient	The index of the correlation coefficient is symbolized by the letter r and a value ranging from $r = +1.00$ to $r = 0.00$ to $r = -1.00$.	The correlation of self-esteem and test anxiety is $r = -.48$ while the correlation of self-esteem and creativity is $r = +.35$.
The Strength of the Association	The closer the value to $r = +1.00$ or $r = -1.00$, the stronger the association between the two variables. The closer the value to $r = 0.00$, the weaker the relationship.	The relationship between self-esteem and depression is stronger than that between self-esteem and creativity.
The Third-Variable Problem	The researcher fails to consider the possible presence of an outside variable correlated with the two variables being considered.	The correlation between self-esteem and depression may be due to the style of parenting experienced by the individual.

assignment, all research participants have an equal chance of being exposed to the different levels of the independent variable. For example, because individuals who have morning appointments may be somewhat different in age or employment status, assigning all clients with morning appointments to the no-feedback condition creates a bias. To avoid this bias, the group to which a client is assigned could be based on the order in which their names are drawn out of a box. This procedure increases the likelihood that the outcome of the study is due to the treatment itself rather than to the composition of the groups.

- *Standardizing procedures.* **Standardization of procedures** involves treating all of the subjects in a similar manner. In this way, the only difference among individuals in each group is the treatment produced by variations in the independent variable. Standardization of procedures might

Summing It Up *Characteristic Strengths and Limitations of the Correlational Approach*

Characteristic Feature	Strength or Limitation	Description
Exploring and Identifying Relationships	Strength	The correlational method provides an efficient means of exploring and identifying relationships between variables of interest in the early stages of theory development.
Ethical and Procedural Considerations	Strength	The correlational method makes it possible to investigate questions that could not normally be addressed due to serious ethical (e.g., harming people) or procedural (e.g., being at the site of a natural disaster to study stress reactions) limitations.
The Third-Variable Problem	Limitation	The problem of interpreting correlational relationships results when the researcher fails to consider the presence of outside variables.
Undetermined Causal Relationships	Limitation	The nature of correlational research does not make it possible to determine the causal relationship between two variables. Such causal statements are necessary if researchers desire to explain the operation of the human personality.

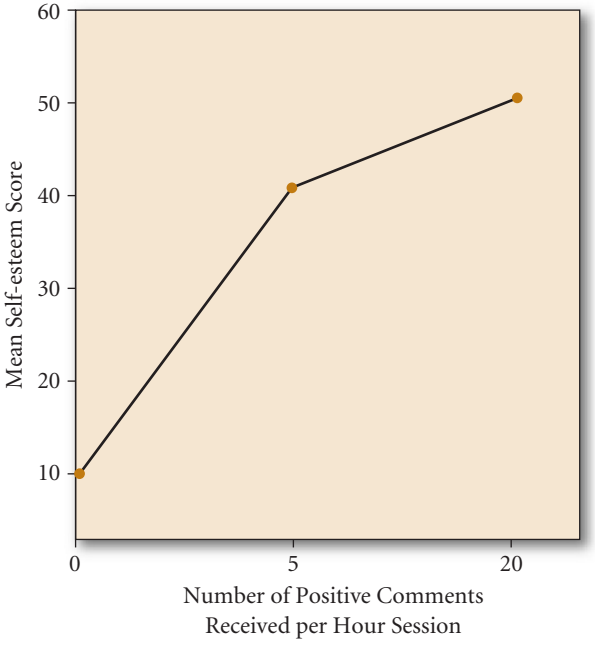


Figure 1.5 The hypothetical results in a study of the effects of positive feedback on self-esteem

include such things as testing subjects in rooms with similar lighting and temperature and at around the same time of day, or presenting the instructions on a tape recorder. As an example, to control for the possibility of acting friendlier when giving feedback than when not giving feedback, researchers must maintain a neutral facial expression and speak in a similar manner and tone of voice to all individuals.

- *Using a control group*. The **control group** contains individuals who are otherwise treated the same as other groups but are not exposed to the treatment conditions of the independent variable. The control group serves as a basis of comparison for the treatment groups. In the self-esteem example (Figure 1.5), the group receiving no positive feedback is the control group.

Experimental control is not an either–or situation; it varies in degree. Experimental control is increased through careful planning of the research. Careful planning helps to control for or eliminate other factors that can serve as erroneous explanations of the results.

Meta-Analysis: A tool for the Comparison of Experimental Research

Meta-analysis is a statistical technique used in determining the consistency and magnitude of the findings from different experimental studies that address a similar issue by combining and averaging their results. Meta-analysis is an important technique because it makes possible the identification of general trends across the many different studies on a particular topic, and aids in the interpretation of these trends. Although the actual statistical computations for performing a meta-analysis are complex and well beyond the scope of this discussion, the underlying logic of this technique is very simple.

Meta-analysis has been used to address the critical issue of gender differences in aggressive behavior (Archer, 2004; Eagly & Steffen, 1986; Hyde, 1984, 1986). An excellent example of how meta-analysis is used to identify general trends in these differences in aggressive behavior is the work of John Archer of the University of Central Lancashire in the United Kingdom. In a recent meta-analysis, Archer (2004) examined the results of 200 different studies that looked at sex differences in different forms of aggression (e.g., hitting, verbal, and nonphysical forms of aggression) from different perspectives (e.g., self-report ratings and ratings from teachers and peers) in various real-world settings (e.g., school, military base, prison) across 13 different countries. Some of the general trends that were observed in this meta-analysis indicated that males displayed a greater amount of physical (e.g., hitting) and dangerous (e.g., use of weapons) aggression than females, who were more likely to use indirect or relational forms of aggression (e.g., deliberate social exclusion and ostracism). Another more general but important finding was that the magnitude of the differences varied depending on the methods of aggression observed (e.g., direct observation of behavior vs. peer ratings vs. self-report vs. teacher ratings), suggesting a certain amount of ambiguity in the expression, measurement, and interpretation of gender differences in aggression (Archer, 2004; Hyde, 2005)

Because it would not be possible to examine so many different factors in a single study, the ability to make comparisons across a number of different studies contributes significantly to our understanding of sex differences in aggression. Another rather extensive meta-analysis of 133 studies drawn from 17 countries assessed the extent to which conformity was related to certain general cultural characteristics (Bond & Smith, 1996). You can explore additional examples and more information about meta-analysis in *Meta-analysis: New Developments and Applications in Medical and Social Sciences* (Schulze, Holling, & Böhning, 2003) and *Systematic Reviews and Meta-analysis* (Torgerson, 2003).

Evaluating the Experimental Approach: Strengths and Limitations

The experimental approach is one of the most powerful research tools personality psychologists have at their disposal. But it also has its characteristic strengths and limitations.

Following are some of the strengths of the experimental approach:

- *Controlled observations*. Much of the research employing the experimental approach is **laboratory research**, conducted in a very structured and controlled setting. The major advantage of laboratory research is that it gives the researcher control over how and when the independent variable is introduced, what the surrounding conditions are like, and how the dependent variable is assessed. Such experimental control greatly increases the ability to eliminate alternative explanations of the results.
- *Causal explanations*. Conclusions about the independent variable causing observable changes in the dependent variable increase when the experimental approach is used correctly. The ability to make causal statements creates a level of understanding that allows a researcher to know "why" something happens. Knowing why personality operates the way it does is a principal objective of the systematic study of personality psychology.

Following are some characteristic limitations of the experimental approach:

- *Group means vs. the individual*. Statements made about causal relationships are based on reporting group means, which indicate how the average person in that group behaved. Studying groups of people and reporting group means indicate the "average" response but may or may

not accurately describe how each person responds (Block, 1995; Lamiell, 1997; McAdams, 1992). This heavy emphasis on the experimental study of personality and reporting of group means has led some personality psychologists to ask "whatever happened to the person in personality psychology?" (Carlson, 1971, 1984).

- *Generalizability of results from the laboratory to the real world.* A concern with research conducted under well-controlled laboratory conditions is how fully the results can be generalized to the real world. For example, how much can studying frustration and aggression in college students for 45 minutes in a laboratory help researchers in understanding the reactions of workers being laid off after many years on a job? A partial solution to this issue is to conduct field research whenever possible. **Field research** includes investigations done outside the controlled conditions of the laboratory in such places as counseling centers, personnel offices, nursing homes, and shopping malls. Although it is somewhat more difficult when doing field research, the researcher still attempts to achieve experimental control over as many external factors as possible.
- *Experimenter bias.* **Experimenter bias** refers to any intentional or unintentional influences the experimenter exerts on the participants of the experiment to behave in a manner consistent with his or her hypothesis (Rosenthal, 1966, 1969). In the example investigating the effects of positive feedback on self-esteem (Figure 1.5), the experimenter might intentionally have been very friendly and nice to those individuals while giving them positive feedback and quite unfriendly to those not receiving any feedback, in an attempt to find support for the hypothesis. Such behavior is dishonest, inexcusable, and rare. Much more likely are unintentional influences involving the researcher unwittingly communicating to the participants (e.g., smiling, nodding one's head) when they behave in a way that supports the hypothesis. Employing research assistants who are not aware of the hypothesis to carry out the experimental procedures helps to control for such unintentional but damaging communication; it is difficult to communicate unintentionally what participants are expected to do if the assistant is unaware of the hypothesis.

Thus, the experimental approach makes it possible for personality psychology to investigate cause-and effect relationships in the study of personality psychology. A summary of the major points discussed in this section is presented in "Summing It Up: Basic Principles of the Experimental Approach" on p. 32, and "Summing It Up: Characteristic Strengths and Limitations of the Experimental Approach" on p. 33. In the next section, you will examine some of the ethical issues associated with the study of personality psychology.

Research Ethics: Protecting the Individual's Rights

The participants in personality research have contributed greatly to our knowledge of personality. To maintain a favorable relationship with them, personality researchers must follow certain ethical standards of behavior. This section presents a discussion of the ethical issues associated with conducting personality research and considers some potential solutions.

Some Ethical Concerns: Hurting, Lying, and Justifying

Some of the ethical concerns associated with conducting research in personality psychology include inducing stress, using deception, and justifying research procedures.

Inducing Stress

Minimizing any emotional harm experienced by participating in personality research is an important ethical concern. But in certain cases, inducing some harm is a byproduct of the type of research. Such is the case when the researcher studying the effects of failure on self-esteem or need for achievement gives participants false feedback by telling some of them they did very poorly on a task and others they did very well.

Deception

Sometimes participants in research attempt to guess what the researcher is trying to find out and modify their behavior accordingly. Such modifications can alter the research results. To help minimize this threat to experimental control, researchers may disguise the true

Summing It Up *Basic Principles of the Experimental Approach*

Basic Principle	Description	Example
Independent Variable	This variable is varied systematically throughout the experiment to observe what changes it creates in that aspect of personality being investigated.	A researcher exposes participants to either a high-, medium-, or no-noise condition to assess their sensitivity to stress.
Dependent Variable	This variable is the specific aspect of personality being investigated for changes created in it by the independent variable.	The measure of stress sensitivity involves assessing changes in muscle tension in response to the different levels of noise.
Experimental Control	Precautions are taken by the researcher to rule out the possibility of other explanations besides the presence of the independent variable being proposed to account for the changes in the dependent variable.	To control for other environmental factors, the researcher tests each participant separately in the same room with the same temperature at the same time of day.
Random Assignment	This technique is used to control for the possibility of individuals being assigned to groups in a systematic manner by guaranteeing each individual has an equal chance of being assigned to any treatment group.	The participants are assigned to one of the three noise conditions by the researcher drawing the number 1 (high), 2 (medium), or 3 (no noise) out of a box.
Standardization of Procedures	Procedures are standardized to make sure individuals in the different treatment groups are treated identically with the exception of the level of the independent variable.	With the exception of the noise level, all of the participants receive the same instructions and forms to complete under similar room conditions.
The Control Group	This group contains subjects who do not receive any level of the independent variable and serve as a basis of comparison for those groups of subjects who do.	The no-noise condition serves as the control group for comparison to the high- and medium-noise conditions.
Meta-Analysis	This statistical technique is designed to compare the outcomes of different studies examining a specific issue to determine the similarity and strength of the outcomes across the studies.	The researcher combines the results of 35 other similar studies examining the effect of different noise levels on various types of stress measures to determine the general effect of noise on stress reactions.

purpose of the study by employing a certain amount of deception. **Deception** involves the researcher withholding the true purpose of the research from the individual or deliberately misleading him or her as to the true nature of the experiment (Bröder, 1998; Ortmann & Hertwig, 1998). The degree of deception can range from modifying the title of the survey to providing the participants with false feedback to staging fake injuries, arguments, and property destruction. As an example, a researcher may have an assistant fake an

Summing It Up *Characteristic Strengths and Limitations of the Experimental Approach*

Characteristic Feature	Strength or Limitation	Description
Controlled Observations	Strength	The researcher can exercise control over such things as environmental conditions and the administration of the independent variable.
Causal Explanations	Strength	Controlling for alternative explanations strengthens the assumption that the independent variable caused the changes in the dependent variable.
Group Means vs. the Individual	Limitation	Because group means, or the "average response," are analyzed, the behavior of any one particular individual is lost.
Ethical Constraints	Limitation	The administration of certain procedures is ethically not possible.
Experimental Biases	Limitation	The researcher might communicate a variety of intentional or unintentional cues to the individual about what is being investigated and how the persons "ought to" respond.

epileptic seizure in a busy mall to study the effect of certain personality factors on helping behavior in stressful situations.

Justifying Research Procedure

Deception is not the rule in personality research; it is justified only as a last resort, when the researcher believes that results from such research will contribute to a greater understanding of the human personality. For example, faking injuries may be justified if the results of the study increase our understanding of how to make people more responsive to the needs of others. Allowing researchers to make decisions justifying their own research introduces the potential of biased judgments. Problems may occur when personal biases about the importance of one's research begin to overshadow concerns for the protection of research participants.

Some Solutions to Ethical Issues: Trying to Make Things Right

The ethical issues just described illustrate some of the special considerations personality psychologists must address when planning the procedures of their research. Some solutions for dealing with these and other ethical considerations include informed consent, debriefing, establishing ethical guidelines, and ethics review boards.

Informed Consent

Informed consent involves giving individuals the chance to decide whether they wish to participate before the actual start of the research. The decision to participate should be based on a reasonable description of the procedures being given to the individuals. Informed consent also involves informing individuals of their right to terminate their participation in the research project at any time they wish for *any* reason. Finally, assuring individuals that their responses will be kept confidential is another important element of informed consent.

Debriefing

Debriefing participants after their participation is designed to help deal with the issue of deception. During a **debriefing session**, the researcher explains to the individual what the purpose of the project was, why

it was necessary to use the deception, and how participants contributed to the project. The purpose of the debriefing session is to minimize any harm or ill feelings the individual might have experienced during his or her participation in the research project. In the debriefing session, explaining what is being studied and why can help to make the individual's participation a more educational and rewarding experience. In the example of the research investigating helping behavior, the researcher would explain that the assistant's injury was fake, say that no one outside the study would know how individual participants behaved, and describe how their participation contributed to our understanding of why people help others.

Are such debriefing sessions effective? Research on the effectiveness of debriefing seems to indicate that while some negative reactions to deception are reported based on receiving negative feedback (Epley & Huff, 1998), most participants perceive such temporary uses of deception as acceptable (Rogers, 1980) and express more positive feelings about psychological research when such deception is followed by a thorough debriefing session (Smith & Richardson, 1983).

Summing It Up *Some Ethical Concerns and Possible Solutions in Conducting Personality Research*

Ethical Concern	Description	Possible Solution	Example
Inducing Stress and Psychological Harm	Research participants may experience psychological discomfort owing to the nature of the procedures used by the researcher.	*Informed consent:* Giving participants the opportunity to decide, based on a reasonable description of the procedures, if they wish to participate in the research project.	In a study supposedly examining "interpersonal dynamics," the participants are told that there is the possibility of some individuals receiving harsh feedback after the group discussion but they can withdraw from the session any time they desire.
Deception	Investigators may withhold a certain amount of information or deliberately mislead research participants regarding the actual purpose of the research.	*Debriefing:* After completing their participation, the individuals are given a complete explanation of the research, the rationale for the deception, and how their participation contributed to the research.	At the end of the research session, the individuals are told that the real purpose of the study was to examine the effect of feedback on self-esteem and that all of the feedback ratings were made up and randomly assigned.
Justification of Research Procedures	Investigators may exaggerate the importance of the research as a means of justifying stress-producing procedures.	*Ethical guidelines:* There are codes of conduct that researchers must follow when conducting research in personality. *Ethical review boards:* Individuals not associated with the research project evaluate it to make sure it meets standard ethical guidelines.	Before being able to conduct the research on feedback and self-esteem, the project is reviewed by a panel of judges on the university's research review committee.

Ethical Guidelines

In addition to informed consent and debriefing, many other ethical considerations are involved when designing and implementing a research project (Blanck, Bellack, Rosnow, Rotheram-Borus, & Schooler, 1992; Koocher & Keith-Spiegel, 1998). To help researchers identify and resolve potential ethical issues, the **American Psychological Association** (APA) has formulated a set of ethical principles to be used as guidelines when planning and conducting research (APA, 1981a, 1982, 1992a, 1992b, 2002). Psychologists who conduct research involving humans are obligated to conform to this set of ethical guidelines. The APA has also developed a set of guidelines for research conducted with animal subjects (APA, 1981a; APA's Committee on Animal Research and Ethics, 2002) and for many of the other activities engaged in by professional psychologists, such as testing, teaching, and counseling (APA, 1977, 1981b, 1990, 2002; Turner, DeMers, Fox, & Reed, 2001) and providing services over the phone and Internet (APA's Ethics Committee, 1997/2002). Finally, any student of psychology who assumes the role of a researcher is also expected to adhere to the ethical standards of professional psychologists (APA, 1977, 1981a, 1982, 2002). For example, any student assisting with the research of a professor must behave in a manner consistent with these ethical principles.

Ethics Review Boards

Preventing researchers from exaggerating the importance of their research as a means of justifying deception or the presence of stress is the major function of an **ethics review board**. The review board evaluates research proposals with respect to their adherence to certain ethical standards (Bullock, 2002). Board members include psychologists and nonpsychologists. Because the board members are not connected directly with the proposals being considered, they can take a much more objective stand on evaluating the ethical nature of the procedures.

Thus, being aware of the ethical issues associated with the study of personality psychology makes it possible to increase our knowledge of personality psychology through systematic research while protecting the rights and safety of those individuals who provide a valuable service by serving as participants in this research. For more information about the ethical issues discussed in this section, read *Ethics in Research with Human Participants* (Sales & Folkman, 2000) or visit the APA's Ethics Office home page (http://www.apa.org/ethics/homepage.html). A summary of the major ideas examined in this section is presented in "Summing It Up: Some Ethical Concerns and Possible Solutions in Conducting Personality Research" opposite.

This concludes our discussion of the scope of and the methods used in the study of personality psychology. In the next chapter we will examine personality assessment by considering the nature of and the techniques used in the measurement of personality.



Chapter Summary: Reexamining the Highlights

- *Defining Personality*. Although personality psychologists define personality in many different ways, the definitions have three common features: uniqueness of the individual, consistency of behavior, and explanations of the content and process of personality.
- *The Scope of Personality Psychology*. The study of personality psychology covers such areas as theory development, personality research, personality development, personality assessment, and applications in personality psychology.
- *Research Methods in Personality Psychology*
  - The clinical approach involves in-depth study of the individual or a small group of individuals through such techniques as case study, individual interview, and analysis of personal documents. Strengths of this approach are its usefulness in gaining a deeper understanding of the individual, studying development and adjustment processes over time, and investigating extreme and rare cases. Limitations include decreased generalizability of results and the potential for personal biases.

- The correlational approach identifies the relationship between two variables. The relationships can be positive or negative and vary in the strength of association between the two variables. Strengths of this approach include the ability to explore and identify relationships between variables and overcome certain ethical considerations. Limitations include the potential presence of the third-variable problem and undetermined causal relationships.
- The experimental approach helps to establish causal relationships among variables. This approach involves systematic intervention of the independent variable to observe any changes it produces in the dependent variable while maintaining experimental control over outside influences. Three techniques for increasing experimental control are random assignment of subjects, standardization of procedures, and use of a control group. Meta-analysis compares the results across different experimental studies. Strengths of this approach include making controlled observations and providing causal explanations. Limitations include an emphasis on the group mean over the individual, limited generalizability of results from the controlled laboratory to the real world, and the potential for experimenter biases.

- *Research Ethics*. Some ethical issues and concerns associated with doing research in personality psychology involve inducing stress, using deception, and justifying research procedures. Possible solutions for dealing with these ethical issues include using informed consent, debriefing, following APA ethics guidelines, and consulting ethics review boards.

Glossary

American Psychological Association The largest national professional organization of psychologists in the United States.

case study method A research method involving an extensive investigation of an individual.

content analysis The identification of recurring themes and ideas through the systematic analysis of a specific set of documents.

control group The comparison group in experimental research that does not receive any level of the independent variable.

correlation coefficient A numerical value indicating the strength of the association between two variables.

correlational research An approach to research designed to identify the relationship between two variables.

debriefing session A period at the end of the experimental session when a complete explanation of the research is given to the participants.

deception The partial withholding of information about the experiment from the participants.

dependent variable That variable in experimental research for which observed changes are attributed to the independent variable.

ethics review board A panel of judges made up of individuals from different disciplines who independently evaluate the ethical standards of proposed research procedures.

experimenter bias Any attempt by the researcher to influence the behavior of the subjects in order to achieve support for the hypothesis.

experimental control The elimination of outside influences on the changes observed in the dependent variable.

experimental research A method of research designed to identify causal relationships.

field research Research conducted in locations other than the controlled conditions of the laboratory.

generalizability The extent to which the information obtained from one situation can be extended to new and different situations.

group mean The arithmetic average of a set of scores from a particular group.

hypothesis A statement expressing the predicted outcome of the relationships between variables.

independent variable That variable in experimental research believed to be the causal factor.

individual interview A one-to-one verbal exchange designed to yield critical information about the interviewee.

informed consent Individuals making their decision to participate on the basis of information about the procedures of the research received before their actual participation.

laboratory research Research done in the controlled conditions of a laboratory.

meta-analysis A statistical technique used to compare the results from different studies addressing a similar issue.

negative correlational relationship A correlational relationship between two variables characterized by a downward trend in the points in the scatter plot.

parsimony A condition of being simple or economical.

personal document Any document a person uses to reveal personal thoughts, feelings, or ideas.

personality The characteristics of the individual that create a unique expression of thoughts, feelings, and behavior.

personality assessment An area of study emphasizing the development of techniques designed to measure different aspects and dimensions of personality.

personality development The study of the factors and processes associated with the development of personality across the life span and in conjunction with other aspects of individual development.

personality psychologist A psychologist whose professional training and research interests are in studying the different aspects and dimensions of personality.

positive correlational relationship A correlational relationship between two variables characterized by an upward trend in the points in the scatter plot.

psychobiography A case study of an individual for the purpose of formulating statements about the individual's psychological characteristics.

psychotherapy The systematic application of principles of psychology in modifying the thoughts, feelings, and behavior of individuals experiencing difficulty coping with life.

psychotherapist A psychologist specially trained to provide psychotherapy.

random assignment A procedure guaranteeing that all individuals have an equal chance of being assigned to any of the treatment groups.

rapport The sense of warmth and trust the interviewer creates with the interviewee.

researcher biases The systematic distortion of information by researchers in support of their position.

scatter plot A graph illustrating the relationship between two variables.

standardization of procedures Treating all subjects in all treatment groups in a similar manner.

subject biases The systematic distortion of information by individuals when they report it to the researcher.

third-variable problem The mediating influence of an outside variable on the observed correlation between two other variables.

theory A systematic collection of ideas and explanations designed to account for a set of observations and predict future observations.