

Part I

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Chapter 1 Orientation to Personality



Orientation to Personality

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SUMMARY



WHAT IS PERSONALITY?

Individual Differences. Charles and Jane both are college freshmen taking an introductory course in economics. Their instructor returns the midterm examination in class, and both receive a D grade. Right after class, Charles goes up to the instructor and seems distressed and upset: He sweats as he talks, his hands tremble slightly, he speaks slowly and softly, almost whispering. His face is flushed, and he appears to be on the edge of tears. He apologizes for his “poor performance,” accusing himself bitterly: “I really have no good excuse—it was so stupid of me—I just don’t know how I could have done such a sloppy job.” He spends most of the rest of the day alone in his dormitory, cuts his classes, and writes a long entry in his diary.

Jane, on the other hand, rushes out of the lecture room at the end of class and quickly starts to joke loudly with her friend about the economics course. She makes fun of the course, comments acidly about the instructor’s lecture, and seems to pay little attention to her grade as she strides briskly to her next class. In that class (English composition), Jane participates more actively than usual and, surprising her teacher, makes a few excellent comments. This example illustrates a well-known fact: Different people respond differently to similar events. One goal of personality psychology is to find and describe those *individual differences* among people that are psychologically meaningful and stable.

Describing and Predicting. Both students received a D, yet each reacted differently to the experience. How consistent are these differences? Would Charles and Jane show similar differences in their responses to a D in physical education? Would each respond similarly if they were fired from their part-time jobs? Would Charles also be apologetic and self-effacing if he received a personal rebuff from a close friend? Will Jane treat a poor grade the same way when she is a senior?

What do the observed differences in the reactions of the two students to their grade suggest about their other characteristics? That is, on the basis of what we know about them already, can we predict accurately other differences between them? For example, how do they also differ in their academic goals and in their past achievements and failures? Do they generally show different degrees of anxiety about tests?

Underlying Processes: What Causes the Differences? Explaining and Understanding. In addition to mapping out the differences among people in terms of their characteristic ways of behaving—that is, thinking, feeling, and acting—personality

psychologists try to understand the psychological structures and the mechanisms or processes that underlie these differences. They ask: Why did Jane and Charles react so differently to the same event? What within each person leads to his or her distinctive ways of behaving? How are these distinctive patterns maintained, and how might they be changed? What must we know about the mind and personality of each person to understand—and perhaps sometimes even predict—what he or she will think and feel and do under particular conditions? Personality psychologists ask questions of this sort as they pursue the goal of trying to explain and understand the observed psychological differences among people.

Alternative Meanings of “Personality”. But what *is* personality? Many people have asked that question, but few agree on an answer. The term *personality* has many definitions, but no single meaning is accepted universally.

In popular usage, personality is often equated with social skill and effectiveness. In this usage, personality is the ability to elicit positive reactions from other people in one’s typical dealings with them. For example, we may speak of someone as having “a lot of personality” or a “popular personality,” and advertisements for glamour courses promise to give those who enroll “more personality.”

Less superficially, personality may be taken to be an individual’s most striking or dominant characteristic. In this sense a person may be said to have a “shy personality” or a “neurotic personality,” meaning that his or her dominant attribute appears to be shyness or neurosis.

More formal definitions of personality by psychologists also have shown little agreement. Influential personality theorists tell us that personality is:

- . . . the dynamic organization within the individual of those psychophysical systems that determine his characteristic behavior and thought (Allport, 1961, p. 28)
- . . . a person’s unique pattern of traits (Guilford, 1959, p. 5).
- . . . the most adequate conceptualization of a person’s behavior in all its detail (McClelland, 1951, p. 69).

As these examples imply, in the past there may have been as many different meanings of the term *personality* as there are theorists who have tried to define it. Nevertheless, a common theme runs throughout most definitions of personality: “Personality” usually refers to the distinctive patterns (including thoughts as well as “affects,” that is, feelings and emotions and actions) that characterize each individual enduringly. Different theorists use the concepts and language of their theories to carve their preferred formulations of personality. These different views of personality will become increasingly clear throughout this book as we examine the concepts and findings of personality psychologists.

Toward a Unifying Definition of Personality. In spite of the differences that continue to exist among alternative approaches to personality, as the science matures there is a growing consensus about the findings and concepts that have stood the test of time and the discoveries that seem most solid. Consequently, the field may be at a point where both a unifying conception of personality and, more modestly, at least a

broadly acceptable definition are becoming possible. A good candidate for such a definition was offered by Pervin (1996, p. 414):

Personality is the complex organization of cognitions, affects, and behaviors that gives direction and pattern (coherence) to the person's life. Like the body, personality consists of both structures and processes and reflects both nature (genes) and nurture (experience). In addition, personality includes the effects of the past, including memories of the past, as well as constructions of the present and future.

THE FIELD OF PERSONALITY PSYCHOLOGY

Within the discipline of psychology, personality is a field of study rather than a particular aspect of the individual. Although there are many different approaches to personality, there is general agreement about what the study of personality must include. Traditionally, “Personality is that branch of psychology which is concerned with providing a systematic account of the ways in which individuals differ from one another” (Wiggins, 1979, p. 395). The traditional focus is on individual differences in basic tendencies, qualities, or dispositions.

Individual Differences and Underlying Processes

Individual differences are always a core part of the definition of this field, but they are not necessarily the whole of it. Thus “. . . the term ‘personality psychology’ does not need to be limited to the study of differences between individuals in their consistent attributes. . . . Personality psychology must also . . . study how people’s [thoughts and actions] . . . interact with—and shape reciprocally—the conditions of their lives” (Mischel, 1980, p. 17).

This expanded view recognizes that human tendencies are a crucial part of personality. But it also asserts the need to study the basic processes of adaptation through which people interact with the conditions of their lives in their unique patterns of coping with and transforming their psychological environment. This view of personality focuses not only on *personal tendencies* but also on *psychological processes* (such as learning, motivation, and thinking) that interact with *biological-genetic processes* to influence the individual’s distinctive patterns of adaptation throughout the life span.

No other area of psychology covers as much territory as the field of personality does; personality study overlaps extensively with neighboring areas. The field of personality is at the crossroads of most areas of psychology; it is the meeting point among the study of human development and change, of abnormality and deviance, of competence and fulfillment, of emotions and thought, of learning, of social relations, and even of the biological foundations that underlie human qualities. The breadth of the field is not surprising because for many psychologists the object of personality study has been nothing less than the total person. Given such an ambitious goal, the student cannot expect to find simple definitions of personality.

Although the boundaries between personality psychology and other parts of psychology are fuzzy, personality theories do tend to share certain distinctive goals;

namely, they generally try to “integrate many aspects of human behavior into a single theoretical framework. Not satisfied with an inventory of psychological facts, personality theorists derive and explain these facts from a central theme” (Bavelas, 1978, p. 1).

Themes in Personality Theory

What should that central theme be? What should a good theory of personality contain and exclude? How should such a theory be built? How can one best analyze and study human behavior? The answers to all these questions are controversial. In dealing with them, different theorists throughout this book will compete for your attention, interest, and even loyalty.

Personality theorists not only tend to cover large areas and seek broad integrations, they also tend to deal with questions of central personal, philosophical, and practical importance. It is personality theorists who typically have grappled with such questions as: What are the basic causes underlying everyday interpersonal behavior? What are the roots of and best treatments for psychological disorders? What is “healthy,” adaptive, creative personal functioning, and how can it be facilitated? What are the most fundamental, universal, enduring psychological qualities of human nature? How do they arise, change, or maintain themselves throughout the life cycle? Given the scope and personal implications of these questions, it is no wonder that personality theories (and theorists!) tend to provoke intense controversies. Sometimes the arguments are so heated that it becomes difficult to examine the questions objectively and to move beyond debate to research. Yet it is only through research that the psychological study of personality can build a view of the individual and of types of persons based on science rather than on speculation.

A History of Diverse Approaches to Personality

Historically, most psychologists in the field of personality share certain basic interests but also tend to favor and adapt one or more of a number of fundamentally different approaches, in part because they focus on different questions. To illustrate, let us briefly consider a concrete case: that of Jane, the college student we already met.

Jane’s test scores indicate that she is very bright, and yet she is having serious difficulties in college. She suffers severe anxiety about examinations and is plagued by an enduring tendency to be overweight. In spite of her chubbiness, there is wide agreement that she is a very attractive person. Her boyfriend describes her as a “knockout”; her roommate says she is a very genuine person whose “inside is as beautiful as her outside.” Jane’s parents and sister see her as intelligent, sincere, and artistic. Her father thinks she may be experiencing an identity crisis but says, “She’ll come through with flying colors.” Jane says, “I remember being pretty lonely [as a very young child]. I started turning into myself in seventh grade and often hated what I saw . . . what really excited me was painting and music.” In college, she says, “I still don’t have a major—I don’t even have a meaning. I’m still searching. . . .”

Table 1.1
Some Basic and Enduring Questions in Personality Psychology

1. What is given to the human being by inheritance (nature); what is acquired through experience with the environment (nurture)? How do nature and nurture—genes and socialization—interact in the course of development?
2. What are the best units for conceptualizing and studying people? Examples of the possible units include situations, physical responses, thoughts or cognitions, needs, conflicts, emotional states, inferred motives, and dispositions.
3. How stable and enduring are particular psychological qualities? How easily can they be changed? By what means? For what ends should such change be attempted?
4. Does what we do and think and feel characteristically depend mostly on the individual or on the situation? How do the two interact? How can one best understand and study the important social interactions between person and environment?
5. What basic, general principles emerge from the study of personality? How do these principles inform us about the causes of the person's behavior and the ways to understand, to modify, and/or to predict what individuals will be like and what they will really do in different situations?
6. What are the basic psychological processes through which individuals construct, interpret, and understand their social-personal world and come to deal with it in stable cognitive, emotional, and behavior patterns that characterize them stably?

Faced with a case such as Jane's, most psychologists try to understand and explain the basic causes of her behavior, including her thoughts and feelings. Many also would want to predict her future behavior as accurately and as fully as possible. With Jane, and everyone in general, they are interested in questions such as those listed in Table 1.1. Applying the issue of nature versus nurture to Jane, for example, raises some important questions. To what extent has inheritance produced her current problems and qualities, including her personal characteristics, her tendencies to be anxious, artistic, and overweight? If genes do play a significant role in determining such qualities, to what degree can Jane still change her own characteristics and behavior? What methods would be best to achieve this change? What role can she herself have as an active agent making such change? Most students of personality want to explain the causes of behavior, but they differ in the types of causes they emphasize, in the methods they use, and in the kinds of behavior on which they focus.

Personality Theories: Alternative Approaches

Some personality psychologists are most concerned with theory and generate ideas about the causes and nature of personality. Each theorist conceptualizes personality somewhat differently. Obviously, Sigmund Freud's view of personality, which emphasized

unconscious motives, is very different from the formulations of early behaviorists, who stressed learned habits. Indeed, the concepts employed by such widely differing theories may have almost nothing in common.

Some personality psychologists believe that human behaviors have their roots in unconscious motives from one's distant past. Others focus on the individual's present relationships and current experiences. Although some theorists search for signs of character traits that are not directly observable, others attend to the person's overt actions—the things the individual does—and seek to sample them as directly and precisely as possible.

A few of the many theoretical alternatives for conceptualizing the same behavior are shown in Figure 1.1. The same behavior—Jane's becoming tense in response to an exam scheduled for tomorrow—is open to diverse interpretations about the reasons underlying her upset. Is Jane's reaction a sign of her more generalized fearfulness? Is it a symptom of an underlying problem provoked or symbolized in some complex way by the exam? Is it part of a learned pattern of exam fears and poor habits for studying? Is it related to more basic conflicts and insecurities about herself?

Conceptualizations about the meaning of behavior are more than idle games; they guide the ways we think about ourselves and the solutions we seek in efforts to better our lives. For example, if Jane's tension reflects unconscious conflicts and fears, it might help her to get better insights into her own motives. In contrast, if Jane's behavior reflects poor study skills, it might be better for her to learn ways of reducing exam-related tensions (for example, by learning to relax) while also mastering more effective ways of studying.

Students are easily puzzled by a field in which different theorists may fail to agree even about the meaning of the same behavior. It may help, however, to recognize that lack of agreement in this instance merely means that the same events can be construed in many different ways. The events are tangible and real enough: Nature goes on “minding its own business”; the events of life keep on happening no matter how

Figure 1.1
Examples of Alternative Conceptualizations about the Mechanisms (Reasons) Underlying the Same Behavior

| Situation | Conceptions about possible underlying mechanisms | Response |
|---|---|---|
| Jane is at her desk preparing for an exam tomorrow. | Jane is a generally fearful person with diffuse anxieties. Jane really fears “success” and unconsciously wants to fail. Jane has learned to fear exams and has poor study habits. Jane's upset reflects her identity crisis about herself as a person. | Jane becomes increasingly tense and cannot study effectively. |

people understand them. People behave and act continuously, but the meaning of those actions and the reasons for them may be conceptualized from many vantage points and for many purposes by different theorists.

From Grand Theories to General Approaches to Personality

In the first half of this century, grand theories of personality were developed by innovators such as Sigmund Freud who proposed distinctive conceptions of the nature of personality, typically based on their own personal and clinical experience. Early personality theorists, like Freud, usually worked as therapists treating psychologically disturbed and distressed individuals and used their cases as the basis for generalizing broadly to the nature of personality as they construed it.

In the second half of this century, personality psychology grew into a substantial field within the larger discipline of psychology. Researchers working with both normal and disturbed populations developed and applied increasingly sophisticated scientific methods to address many central issues in personality psychology. Increasingly it became possible to examine important questions about personality with research evidence.

In spite of the growth of personality psychology as a field of scientific research, most theories of personality do not lend themselves to precise scientific testing that allows them to be either supported or disconfirmed clearly on the basis of empirical studies (Meehl, 1990, 1995). There are many reasons for this, ranging from the difficulty of specifying the theoretical premises in testable terms to various types of experimental and statistical limitations in conducting and evaluating the test results. Because it is difficult to firmly reject or support a given theory on the basis of empirical studies, theories often function more like general guidelines or orientations for studying personality and interpreting the results from a particular perspective or framework. This, however, does not diminish their importance and their implications for those who care about personality.

While theories may not lend themselves to clear support or disconfirmation, they provide an orientation and perspective that stimulate different types of research within the field and different types of real-life applications of everyday potential significance. Most notably, they lead to different forms of therapy or intervention designed to modify or enhance personality constructively—with major differences among approaches in what is considered “constructive.” They also lead to different approaches to assessing personality and to thinking about persons, including oneself, and thus matter a great deal to the image one develops of personality and individuality itself.

Toward a Coherent Perspective

To the beginning student, the fact that there are different approaches to personality may seem bewildering. When entering a new field one may simply want to get “The Truth” without the complexities of considering different viewpoints. A little reflection, however, leads one to a basic conclusion: The individual is influenced by many determinants, and human behavior reflects the continuous interaction of many forces both in the person and in the environment or situation (Mischel & Shoda, 1998).

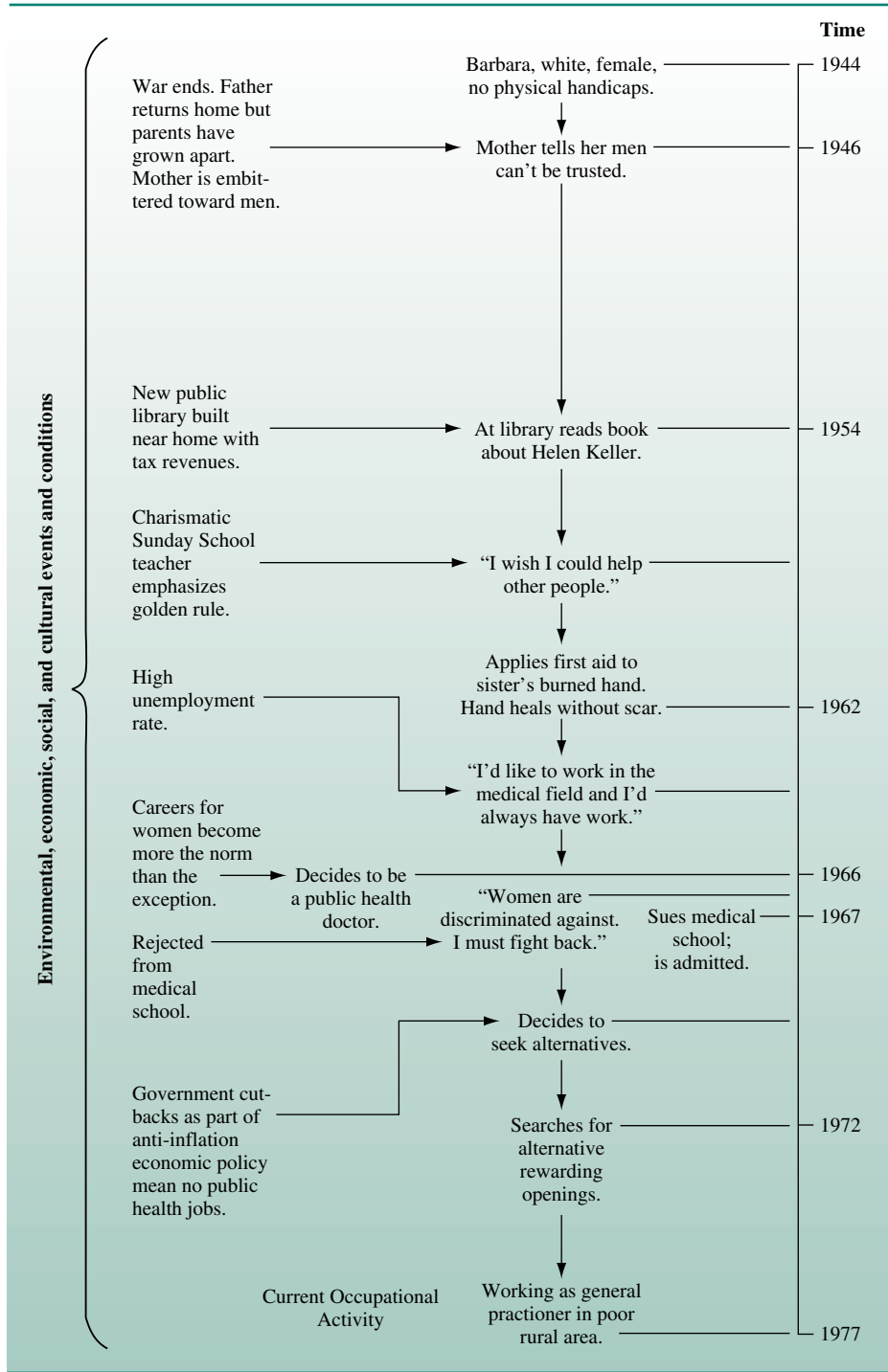


Figure 1.2
Many Factors, Both in Barbara and in Her Environment, Interacted and Combined to Influence Her Progress toward Her Present Occupation

source: Adapted from Krumboltz, J. D., Mitchell, A. M., & Jones, G. B. (1976). A social learning theory of career selection. *The Counseling Psychologist, 6*, 71-81.

Consider, for example, how a person chooses a career. The many influences on such a choice might include inherited and acquired abilities and skills, interests, and a wide range of specific experiences and circumstances. We can see this in the case of Barbara, a person whose decision to become a general practitioner of medicine in a poor rural area was affected by many factors throughout her life, as Figure 1.2 illustrates. If human behavior is determined by so many forces—both in the person and in the environment—it follows that a focus on any one of them is likely to have limited value.

Often our understanding improves when information from many perspectives and sources is taken into account. With Jane's anxiety about examinations, for example, it is informative to focus on her immediate fears and the conditions that currently evoke them. But it also may be worthwhile to examine the history of those fears, relating them to other aspects of her changing life. To use a historical focus, however, does not make it pointless to study the biological mechanisms involved in Jane's anxiety or to investigate the role of heredity in her tendency to be fearful or to study how she thinks and processes information when she is emotionally upset.

Alternative approaches, then, can complement one another constructively, increasing our total understanding and knowledge of individual cases and of personality as a whole. At times, to be sure, they can also produce critical findings that contradict each other and generate real conflicts. But those are some of the most exciting moments in science and often set the stage for dramatic progress.

OVERVIEW OF THIS BOOK: FIVE APPROACHES TO PERSONALITY

Personality psychology is rich in ideas, theories, and findings that advance and refine the understanding of human beings. In this book you will learn some of the major theoretical approaches to personality. We will survey some of the main concepts developed to describe and understand the important psychological differences among people, and we will consider the concepts and findings that are central to diverse views of human nature. The range of these concepts is great, with much research relevant to each. To capture the essentials, this text is organized into the five major approaches to personality that emerged from a century of work in psychology as a science and profession. Each part presents the main concepts, methods, and findings associated with that approach, and each focuses attention on distinctive aspects of personality. In combination, the five approaches provide an overview of the many complex and diverse aspects of human personality. Let us briefly preview each.

Psychodynamic Approaches: Uncovering Underlying Motives

The psychodynamic orientation focuses on psychological processes of personality interpreted as a largely unconscious struggle within the mind. It conceptualizes unconscious internal forces, or **psychodynamics**, within the personality that clash and conflict and reach compromises in a delicate balance; the individual's distinctive problems and behaviors, often in the form of symptoms, emerge from the underlying conflicts and the unconscious attempts to resolve them. For example, the compulsion to wash

one's hands many times even when they are clean may reflect deep hidden wishes and conflicts beyond the victim's own awareness and understanding. Likewise, victims of traumatic experiences, such as sexual abuse in early childhood, may be tormented by fragmented memories and anxieties that return in nightmares and symptoms. The challenge is to unravel the meaning of the observed and often seemingly bizarre behaviors in order to help the victims achieve greater awareness and understanding of them and become able to cope with them rationally.

Although psychodynamic approaches have importantly influenced clinical psychology and psychotherapy for many years, some of their main ideas have suffered from being cast in a form that made them difficult to test scientifically. Consequently, the approach became separated from many of the mainstream developments in personality psychology. In recent years, however, there has been a renewal of interest in ideas about the unconscious and complex mental representations, motivations, and emotional reactions, stimulated by the development of increasingly sophisticated models of the mind in cognitive psychology. These developments make it possible to revisit and reconceptualize some of the contributions and insights of psychodynamic approaches, allowing them to be incorporated into current personality theory.

Trait and Biological Approaches: Dispositions, Genes, Biochemistry, and Evolution

People readily characterize one another in terms of personality traits: friendly, assertive, submissive, conscientious, and so on. Enduring personal qualities are the essence of trait concepts, and it is assumed that people are consistent and stable with regard to at least some important traits. A major goal is to discover the set of traits that apply to most people and on which they are relatively consistent. Psychologists in these approaches believe that they are well on their way to identifying the most important traits of personality. They compare individuals with regard to these traits in terms of the degree to which each trait characterizes him or her.

In addition to identifying and describing important individual differences, researchers within this approach explore their biological-genetic bases. They study the role of heredity in personality, for example, by comparing the degree of trait similarity found in identical twins who were raised apart versus in those who were raised together within the same home. Research increasingly points to the important role of genes in personality, providing much encouragement for this approach and calling attention to the complex interplay between genetic influences and environmental-situational influences. Likewise, there are exciting prospects about biochemical methods for influencing personality, with potential therapeutic applications for people suffering from severe psychological problems.

Still another route for connecting personality to its biological roots comes from the evolutionary theory. This theory—so basic for all science—is providing fresh insights as it is applied to understanding why particular personality characteristics and individual differences developed. It also addresses how traits and behavioral dispositions are expressed in relation to the problems posed by the environment and to such evolutionary challenges as finding and retaining a mate, reproducing, and surviving.

Phenomenological Approaches: The Self and the Internal View

Phenomenological approaches in part arose as a humanistically oriented protest against earlier views of personality. These approaches insist that people are not merely passively molded by internal and external forces that shape what they become. Instead, phenomenologists focus on the individual's perceptions and interpretations of the meaning of events and on each individual's own subjective experiences and feelings as he or she encounters those events. Honest self-awareness of what one is experiencing and self-acceptance of genuine feelings, in this view, are key ingredients of personal growth and fulfillment. People are capable of knowing themselves, of being their own best experts, and self-knowledge and self-acceptance become the route to realizing one's human potential fully.

In its contemporary form, this approach (particularly popular in the 1960s) has achieved a new life and vitality. One of its favorite concepts, the self, has become a major focus of research and has a central role in most accounts of personality. Its influence is seen in thinking on topics that range from self-esteem, self-control, and emotional self-regulation to interpersonal relations and the impact of culture and other people on self-concepts.

Behavioral Approaches: Experimental Analysis of Behavior

Early behavioral approaches provided the sharpest conflicts with the phenomenological approach and further stimulated its development. Traditionally, behavioral approaches to personality emphasized that all that we can ever observe directly about people is their behavior, that is, what they say and do, including their physiological responses. Even the most interesting inferences about motives, traits, or internal experiences rest upon observations of what the person says and does under various circumstances: We have no way of knowing what goes on inside other persons except by observing carefully what they say and do.



Advances in brain imaging offer a new way to study mental activity.

Behavioral approaches focus on an important behavior relevant to concepts about personality and then analyze the situations or conditions that seem to control that behavior, using experiments to test the effects. They have been especially useful for understanding the conditions through which behaviors relevant to personality are learned and can be modified. The results have been applied to help

people overcome a variety of serious personal difficulties, ranging from common but debilitating fears, to weight problems, to learning deficits and handicaps, to increasing personal assertiveness.

In their original forms, these approaches drew mostly on classic types of learning such as conditioning. In a completely new direction, behavioral approaches are seen now in the rapid developments in cognitive neuroscience, the study of mental processes and the brain structures and functions that underlie them. For example, advances in brain imaging make it possible to see the areas of the brain that become activated during different mental activities, such as when thinking about emotion-arousing events. These new methods make it possible to analyze mental functions previously considered too mysterious for behavioral study with the objective methods of science.

Recent versions of the behavioral approach also have expanded so that they now deal more with social and interpersonal behaviors and problems using cognitive and social concepts and methods that go beyond the earlier conceptions of learning theories. In their present forms, these approaches remain relevant by supplementing their original methods with more contemporary developments originally designed to overcome their limitations, particularly as developed by the cognitive social approaches described next.

Cognitive Social Approaches: The Mind in Social Interaction

In the past 30 years the approaches called “cognitive social” (or “social cognitive”) have emerged. As the name suggests, the focus here is on the social and cognitive aspects of personality, and much has been borrowed from and built upon findings from other areas of psychology. This reaching out to adjacent areas, including social, cognitive, and developmental psychology, has been intentional, part of an effort to construct a comprehensive account of personality processes based on the strongest foundations available. Thus although these approaches have generated novel concepts, methods, and much research, they are rooted in elements from each of the earlier approaches and try to integrate them into a coherent view of personality.

Rather than reflecting the exclusive views of any single theorist, these approaches emerged from the work of many theorists who shared common themes and goals. These diverse researchers and theorists were unified, however, in a focus on the individual’s ways of thinking and processing information (*cognitive processes*) as determinants of his or her distinctive and meaningful patterns of experience and social behavior. Most recently, efforts have been made to go beyond the social and cognitive aspect of personality and to incorporate feelings, affects, and emotions within the same framework.

Toward an Integration: Emergence of a Cumulative Comprehensive Approach?

Each of the above approaches allows a view of particular aspects of personality and focuses on those features, studying them in depth but often neglecting or underestimating the other aspects. In recent years, however, personality psychologists seem to be crossing more freely over what used to be rigid boundaries dividing the major theoretic-

cal approaches. As one reviewer of ongoing work within diverse research orientations put it:

Their research programs frequently inform one another. The complementary findings are beginning to portray a coherent (albeit incomplete) picture of personality structure and functioning. Personality psychologists have found common ground (Cervone, 1991, p. 371).

A more comprehensive view of the person seems to be emerging that seeks to incorporate many of the insights and findings from each of the diverse approaches within one unifying broader framework (e.g., Cervone, 1991; Mischel & Shoda, 1998). If this trend continues, it promises to be an exciting moment for the field. It suggests that personality psychology is becoming a science in which knowledge and insights are cumulative, allowing each generation of researchers to revise earlier conclusions, often radically, but nevertheless to build progressively on one another's foundations. If so, major contributions provided by each of the approaches to personality will ultimately become more integrated, retaining those elements that stand the test of time and research as the science matures.

In the same vein, there also are indications that boundaries are being crossed productively between personality psychology and related fields, both at more molar, social-cultural levels of analysis (e.g., Nisbett, 1997) and at more molecular levels, particularly in cognitive neuroscience and in behavioral genetics (Plomin, DeFries, McClearn, & Rutter, 1997; Rothbart, Derryberry, & Posner, 1994; Rothbart, Posner, & Gerardi, 1997). It has long been the hope of personality psychology that it could some day provide an integrated view of the person that at least begins to capture the complexity and depth of its subject matter: Optimists in the field are beginning to think that day might not be too far off. The last sections of this text, drawing on findings and concepts from all of the approaches discussed in earlier pages, present recent efforts in this direction.

STUDYING PERSONALITY

To convert personality theories from speculations about people into ideas that can be studied scientifically, we must be able to put them into *testable* terms. It is basic to science that any conceptualization must be potentially testable. This is what makes science different from the simple assertion of opinions. Perhaps the most distinctive feature of modern personality psychology has been its concern with studying ideas about people by actually putting those ideas to the test.

Testing the Limits of Approaches

When theorists develop their ideas, they often try to extend them as far as possible to probe their relevance for diverse areas of life. Such a stretching of concepts can be extremely fruitful for builders of theories because it helps them to generalize and to see how widely their ideas apply. Thus the theorist may try to make his or her ideas about the “unconscious” or the “self” or “early experience” serve to explain many different human phenomena. One or two favorite concepts may be used to deal with everything

from love to hate, from birth trauma to fears about death, from deep disturbance to great achievement. While such an extension of ideas may be of use to the theorist, the student should ask, “Does it fit? How does the theorist know? What would we have to do to discover whether he or she is right or wrong? What are the consequences of thinking about it that way?” Likewise, efforts to measure and analyze personality supply information not only about the people who are measured but also about the meaning of the ideas and methods used in the measurement process. What we learn about 10 children from their answers to an intelligence test, for example, tells us something about the test and the concept of “intelligence” as well as something about the children.

Such an analytical, skeptical attitude is the heart of the scientific approach. It is a necessary attitude if we want to go beyond learning what different theorists say about human nature and personality to testing their ideas so that we can discriminate among those that have no substance and those that are worthy of further study. To test theoretical ideas to find the ones worth retaining, it is necessary to turn from theories to methods, applications, and findings. Therefore, for each theoretical approach we will consider those methods of personality study associated with that conception. We will describe the main methods of assessing persons favored by each approach and examine their relevance for understanding individuals. We also will consider some of the main research findings stimulated by each approach.

Practical (Therapeutic) Applications

Personality theories are often *applied* to help improve the psychological qualities of our lives. Even people whose problems are not severe enough to seek help from professionals still search for ways to live their lives more fully and satisfyingly. But what constitutes a fuller, more satisfying life? Given the diversity and complexity of human strengths and problems, it seems evident that simple notions of psychological adequacy in terms of “good adjustment” or “sound personality” are naïve. More adequate definitions of “adaptation” and “abnormality,” of “mental health” and “deviance,” hinge on the personality theory that is used as a guide. The theoretical conceptions discussed provide distinctive notions about the nature of psychological adequacy and deviance. Each also dictates the strategies chosen to try to change troublesome behaviors and to encourage better alternatives.

Many personality psychologists are concerned about practical questions. They tend to concentrate on searching for useful techniques to deal with the implications of personality for human problems, such as depression, anxiety, and poor health, and to foster more advantageous patterns of coping and growth. In addition to having enormous practical and social importance, attempts to understand and change behaviors provide one of the sharpest testing grounds for ideas about personality. These efforts include different forms of psychotherapy, drugs and physical treatments, various special learning programs, and changes in the psychological environment to permit people to develop to their full potential. Research on these topics informs us about the usefulness and implications of different ideas about personality change. The concepts, methods, and findings relevant to personality change and growth will be discussed at many points as they apply to each of the major approaches.

Resistance to a Science of Personality

Efforts to study personality scientifically face many problems. On the one hand, it seems fascinating to try to gain insight into the causes of one's own behavior and the roots of one's own personality. But at the same time we may resist actually achieving such an understanding and seeing ourselves objectively. Many scholars feel that it does violence to a person's complexity and "humanness" to study and "objectify" him or her in the framework of science. Instead, they suggest that perhaps the most perceptive and provoking studies of personality are found in great literary creations, such as the characters of a great novel.

People do not perceive themselves entirely objectively. Thus although it may be fashionable to say in public that human behavior, like that of other organisms, is "lawfully determined," privately the laws of nature may seem to be operating on everyone except oneself. Subjectively, while other people's behavior may be seen as controlled by "variables" or "conditions," one's own important thoughts, feelings, dreams, and actions may seem to defy such control and to resist scientific analysis.

Even within the field of personality psychology, there is some resistance to "objectifying" personality. For every personality psychologist who believes that people must be studied under carefully controlled experimental conditions, there is another who believes that individuals can be understood only by investigating them under "naturalistic," lifelike conditions. As one sensitive student of people noted, lives are "too human for science, too beautiful for numbers, too sad for diagnosis, and too immortal for bound journals" (Vaillant, 1977, p. 11).

Some personality psychologists commit themselves to quantitative, statistical techniques for gathering information from large groups. Others rely on intuition and subjective judgments based on lengthy personal experience with a few people. Some urge us to concentrate on "peak experiences"—moments of personal, spiritual, or religious climax and fulfillment. Others prefer to study simpler behaviors under conditions that permit a clearer analysis of causation. For example, they prefer to study the responses of a young child to specific instructions under the closely controlled conditions of a testing room at school. Different experts favor different techniques of investigation, but all of them generally share a conviction that ultimately theoretical ideas about personality and human behavior must be tested and applied.

Sources of Information about the Person

Psychologists guided by different approaches obtain information about people from many sources and through a number of strategies. Just as alternative approaches can and do complement one another, so do the different methods employed in personality psychology provide useful information for answering different questions. One of the most frequently used sources of information for the personality psychologist (sometimes called the **person-ologist**) is the **test**. A test is any standardized measure of behavior, including school achievement tests, mental ability tests, and measures of personal qualities, such as anxiety or friendliness. Table 1.2 shows an example of a test question used to measure self-reported anxiety. Some tests are *questionnaires* or *ratings* that may be answered directly

Table 1.2
Typical Test Item from a Questionnaire Used to Measure Self-Reported Anxiety

Situation 1 of the S-R Inventory of General Trait Anxiousness

“You Are in Situations Where You Are Being Evaluated by Other People”

(We are primarily interested in your reactions *in general* to those situations where you are being evaluated by other people. This includes situations at work, in sports, in social situations, etc.)

Mark one of the five alternative degrees of reaction or attitude for each of the following 9 items.

| | Very much | ← | → | Not at all |
|-----------------------------------|-----------|---|---|------------|
| Seek experiences like this | 1 | 2 | 3 | 4 5 |
| Perspire | 1 | 2 | 3 | 4 5 |
| Have an “uneasy feeling” | 1 | 2 | 3 | 4 5 |
| Look forward to these situations | 1 | 2 | 3 | 4 5 |
| Get fluttering feeling in stomach | 1 | 2 | 3 | 4 5 |
| Feel tense | 1 | 2 | 3 | 4 5 |
| Enjoy these situations | 1 | 2 | 3 | 4 5 |
| Heart beats faster | 1 | 2 | 3 | 4 5 |
| Feel anxious | 1 | 2 | 3 | 4 5 |

SOURCE: Adapted from Endler, N. S., Edwards, J. M., & Vitelli, R. (1989). *Endler multidimensional anxiety scales: Manual*. Los Angeles, CA: Western Psychological Services.

by the subject or by others who have observed the subject. Other tests involve *performance measures* (such as tests of arithmetic ability or spatial skills).

Another valuable source of information is the **interview**—a verbal exchange between the subject and the examiner. Some interviews are tightly structured and formal: The examiner follows a fixed, prescribed format. For example, in research to survey people’s sexual activities, the interviewer might follow a standard series of questions, starting with questions about the subject’s earliest experiences and going on to inquiries about current practices. Table 1.3 shows some typical questions from such an interview.

Table 1.3
Typical History-Taking Questions from a Survey of Sexual Activities and Attitudes

In adolescence, to which parent did you feel closest? Why?

In your school years, did you have special friends? Mostly boys? Mostly girls?
 Were your schools coeducational?

When did you first find out how babies are conceived and “where they come from”? How did you learn this? How did you react?

When did you start to date? Did you date in groups or on single dates?

NOTE: These questions are similar to those used in Masters, W. H., & Johnson, V. (1970). *Human sexual inadequacy*. Boston: Little, Brown.

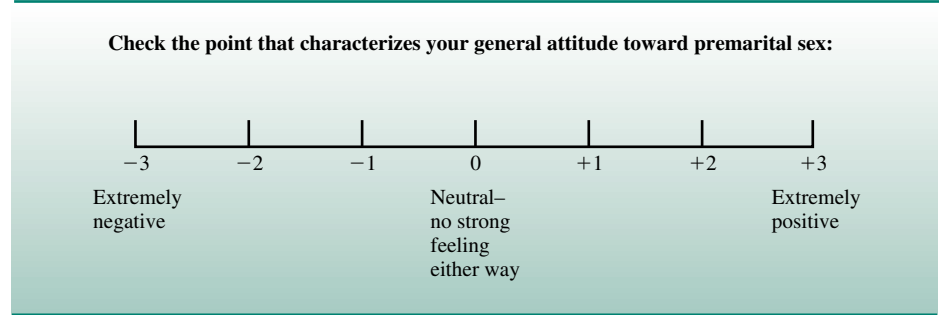


Figure 1.3

Any Attribute That Can Be Assigned Two or More Values Is Called a “Variable.” Here Is an Example of Attitude toward Premarital Sex Treated as a Seven-Point Variable

Responses to paper-and-pencil tests and to interviews are widely used sources of information but are by no means the only ones. Valuable information also comes from *nonverbal responses*, such as changes in facial expression. Psychologists also study performance in special situations in which they can systematically observe selected behaviors. For example, they might investigate the frequency and intensity with which subjects engage in physical aggression, as when children are given a chance to attack a large inflated doll or adults have an opportunity to punish another person. Similarly, they might study responses to a solicitor who asks for charitable donations or reactions to someone who needs help and appears to be in distress. **Physiological measures**, such as heart rate, types of brain waves, amount of sweating, and degree of sexual arousal, can also provide valuable information. For an ingenious combination of methods used to study the ways in which obese and non-obese people differ, see *In Focus 1.1*.

The data that psychologists who study personality collect, regardless of their source, are conceptualized as **variables**. A variable is an attribute, quality, or characteristic that can be given two or more values. For example, a psychological variable might be an attitude toward premarital sex treated in terms of two values—positive or negative. Of course, the same variable could also be categorized into finer units such as seven points on a single scale in which 0 is neutral, +3 is extremely positive, and -3 is extremely negative (Figure 1.3).

Correlation: What Goes with What?

One way to study personality is to try to find relations among variables. Often, two or more variables seem to be associated—seem to “go together”—in such a way that when we know something about one variable, we can usually make a good guess about the other variables. For example, people who are taller generally tend to weigh more; when we know how tall someone is, we can roughly predict the person’s weight. This “going together,” this “co-relationship” or joint relationship between variables, is what

IN FOCUS 1.1

Individual Differences in Emotionality: Obese versus Normals

There are great individual differences in the intensity of emotional responses made to any situation. The sight of blood may cause one person to faint while another remains calm. The importance of individual differences in emotionality has been illustrated by studies that compare the reactions of obese people with those of normal-weight people (Schachter & Rodin, 1974). Obese and normal-weight male college students listened to one of two kinds of tape-recorded material: neutral or emotionally disturbing. The emotionally neutral tapes invited the listener to think about rain or about seashells. The emotionally disturbing tapes detailed horrible images of the bombing of Hiroshima (for example, the skin of the victims coming off) or the listener's death as a result of leukemia (such as the incapacitating weakness and the terrible pain). Immediately after listening to the tape, the participants were asked the following five questions designed to measure emotionality:

1. Are you experiencing any palpitations?
2. Do you think your breathing rate is faster than usual?
3. Are you feeling generally upset?
4. Are you experiencing any anxiety?
5. Do you feel emotionally aroused?

Subjects responded to each of these questions by marking a scale numbered from 0 to 100, with 0 meaning "not at all" and 100 meaning "extremely."

Comparisons show that the obese individuals were more disturbed by the emotional tapes than were the normal-weight ones (see Figure 1.4). Note, however, that in their responses to neutral tapes, the obese were *less* emotional than the normals. In another study, when threatened with painful shock, obese individuals described themselves as more nervous than did normals (Schachter, Goldman, & Gordon, 1968). Although the

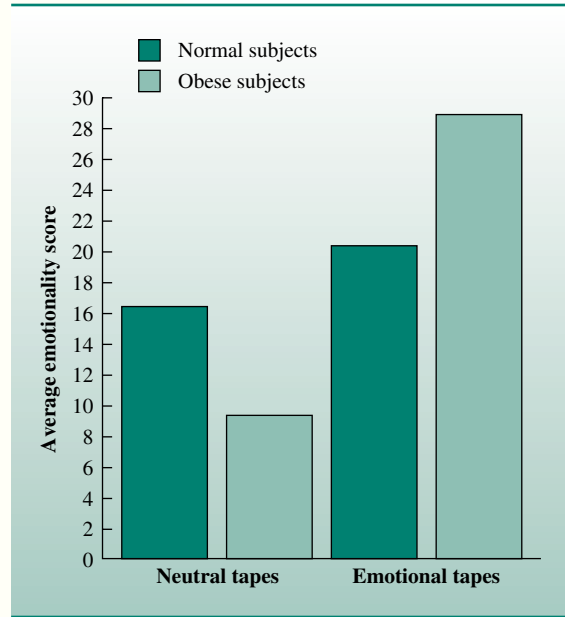


Figure 1.4
Emotional Responses of Normal and Obese People After Listening to Neutral and Emotional Tapes

SOURCE: Adapted from Schachter S., and Rodin, J. (1974), *Obese humans and rats*. Potomac, MD: Erlbaum.

differences in emotionality between obese and normals in both these studies were too large to be due to chance, there were great differences among the individuals in each group. Emotionality depends on many variables both in the person and in the situation, and body weight is only one relatively small influence.

psychologists mean by the term **correlation**. Correlations are discovered by searching for answers to specific questions such as: Do attitudes toward premarital sex relate to subsequent marital adjustment? Is depression related to age? Do college grades relate to income in later life? A correlational study seeks not only to answer such questions with “yes” or “no,” but also to provide a quantitative estimate of the degree of relatedness.

Correlations are called *positive* when a high magnitude of one variable is associated with a high magnitude of the other variable. For example, there is a positive correlation between the number of years of schooling a person has had and that person’s ultimate socioeconomic level: the more schooling, the higher the person’s socioeconomic level, and vice versa. A negative correlation, on the other hand, occurs when a high magnitude of one variable tends to be associated with a relatively low magnitude of the other variable. For example, there is a negative correlation between a person’s intelligence and how satisfied he or she will be in doing a dull job.

The degree of relationship or correlation may be expressed quantitatively by a number called a **correlation coefficient**, symbolized by the letter r . Theoretically, a correlation coefficient can go from no correlation whatsoever, expressed as 0, to a perfect positive correlation (+1) or a perfect negative correlation (−1). In fact, correlations that are even close to perfect are very rare in psychology, showing that although many psychological variables are, indeed, associated with one another, the association usually is not very strong. Correlations of about .30 to .50, either positive or negative, are fairly common in psychology. Such correlations may allow predictions that significantly exceed chance guesses, but they are still far from perfect. Statistical computations are used to evaluate the strength, or “statistical significance,” of particular correlation coefficients and to determine how far a given association exceeds that which would be expected by chance.

Correlations are useful, but they do not indicate cause and effect. Suppose a positive correlation were found between the income level of parents and the IQ level of their children. You could not conclude from this that income causes intelligence; the correlation would only alert you to the many things that might make the two tend to occur together. For example, the correlation might partly reflect the enriched environment or special privileges that more affluent parents could provide. Correlations can, however, be used to make predictions. For instance, one study used correlational methods to try to predict which students would be among the 500 who drop out of American medical schools each year (Gough & Hall, 1975). Among the best predictors were poor scores on a quantitative ability test and poor premedical grades.

Interpreting Correlations

Correlations, whether positive or negative, are almost never perfect. How can the less-than-perfect correlation, the one that falls somewhere between 0 and +1.00, be interpreted? The first thing to keep in mind is that a correlation is not a perfect percentage. A correlation of .50, for example, between shyness and femininity, does not mean that 50% of the variation of scores on the shyness measure (that is, in the differences among persons on the measure) is accounted for, or explained, by the relation with scores of the femininity measure. Nor is a correlation of .50 twice as strong as a correlation of .25.

Correlations tend to seem more powerful than they actually are. Unless a correlation is practically 1.00, many individuals who score relatively high on one variable will score relatively low on the other, making individual predictions difficult, inaccurate, or even impossible. The correlations typically found in psychological research tend to be moderate in strength, and therefore predictions of scores on one variable from the score on the other variable are moderately accurate.

Technically, one can estimate the percentage of the variance that the two distributions of scores have in common by squaring the correlation coefficient and multiplying by 100. For example, if the correlation is $.50$, then $.50^2 \times 100 = 25\%$. A correlation of $.50$ between “shyness” and “femininity,” for example, means that 25% of the variation in shyness scores is accounted for by the femininity scores and the reverse. If the correlation between the two scores had been $.25$, then only about 6% of the variance would have been accounted for: 94% of the variance (of the individual differences in scores) would remain unexplained. A correlation of $.25$ is thus only one-fourth as strong as a correlation of $.50$.

Experimentation: Trying to Control the Phenomenon

To study cause-and-effect relations systematically, many psychologists favor the **experiment**—the basic method of science. An experiment is an attempt to manipulate or alter one variable of interest so that its impact can be determined. To do that, one tries to control all other conditions so that their influences can be discounted; then the effects of the variable of interest can be measured. The main limitation of the experiment in psychology is that to achieve good control over extraneous conditions the experimenter may have to set up situations that are so artificial and simplified that they have no resemblance to real life. The challenge of good experimentation in psychology is to achieve a reasonable degree of control without distorting the phenomenon one wants to study. Because the ethics of good research further limit the phenomena one can or should experiment upon, there are serious constraints on the types of experiments possible. Nevertheless, as will be seen throughout the text, personality researchers have managed to do many useful and relevant experiments.

The **independent variable** is the stimulus or condition that the experimenter systematically manipulates or varies in order to study its effects. It is called the independent variable because it does not depend on the subject’s behavior; its presence or absence, increase or decrease, occur regardless of what the subject does. For example, to study altruism, one might expose subjects to a confederate who solicits contributions for a charity. The confederate might dress well and present a high-status appearance when soliciting half of the subjects and dress in a sloppy, low-status fashion with the other half. This variable—the solicitor’s appearance—would be independent of the subject’s behavior; it would be determined solely by the experimenter to see how it influences the subject’s behavior.

The **dependent variable** is the aspect of a subject’s behavior that is observed after the experimenter has manipulated the independent variable. It is a measure of the subject’s response to the independent variable. In the altruism example it might be the amount of money that subjects promise to give the solicitor.

For many purposes **control groups** are essential in experimentation. Control groups are like the **experimental group** except for one crucial difference: They get no independent variable manipulation or treatment. They therefore provide comparisons for evaluating the effects of the experimental treatments that are given to the experimental groups. In the study of academic attitudes and course performance (see *In Focus 1.2*), for example, the inclusion of control groups made it possible to show that the measured improvement in grades and attitudes was not just due to taking tests, involvement in a prediction study, or the passage of time.

Experimenters want to select groups of subjects who are comparable or matched in all respects, such as sex, age, intelligence, and general background so that these factors can be ruled out as the causes of any differences found in the dependent variable. All subjects receive the same treatment with the crucial exception of the one factor that the investigator varies. Because it is usually difficult or impossible to match subjects who are assigned to different conditions, assignments may be made by **randomization**, that is, on a purely chance basis, as by flipping a coin or picking names out of a hat. The psychologist recognizes that there will be great individual differences among the subjects in any one group but assumes that by using many subjects and as-

IN FOCUS 1.2 *An Illustrative Experiment: Improving Course Performance*

To illustrate some of the basic features of a psychological experiment, let us consider a classic study by Meichenbaum and Smart (1971). They investigated the academic performance and attitudes of first-year engineering students who were working at an academic level so low that it endangered their continuation in school. The researchers tested the hypothesis that these students could be helped to do better if they increased their expectations for academic success. For this experiment the investigators randomly assigned the students to serve as subjects in one of three groups after the end of the first semester.

The subjects in one group received the experimental treatment designed to increase their expectancies. They were informed by the counseling service that tests they had taken earlier showed they were “late bloomers” whose mental abilities would soon reach a fuller development. They were also told that their test results predicted a high likelihood of academic success for them by the end of their first year. In the second group subjects were told that their test results permitted no definite predictions for either better or worse performance. This

group was called the “no-prediction control” group. The third group was called the “assessment control” group; its members had taken the same tests but were not given any expectation manipulation or prediction. The two control groups served as comparisons to see whether the experimental treatment would produce more improvement than that which might result from the students’ just knowing that they were participating in a special prediction study or even from merely taking the tests.

Grades and measures of attitudes toward the school courses were obtained at the end of the year for all subjects. The results showed that in two out of four courses the students who had been told to expect success improved their grades more than did those in the two control groups. On the attitude measures, the students who expected to succeed also reported greater interest in their course work and more confidence about school work compared with both control groups. The study thus gave good evidence that by increasing their expectancy for academic success, borderline students could be helped both to do better academic work and to feel more positive about it.

signing them to the groups at random, these differences will average out. For example, although there may be great differences in intelligence among the subjects who participate in a study, if they are all assigned to groups randomly, the number of bright and dull ones in each should be approximately equal so that the average level of intelligence for all groups will be similar and thus matched. In the study of course performance (*In Focus 1.2*) the assignment of subjects to groups in a strictly random fashion ruled out the possibility that the three groups differed in some way beyond the treatments they were given.

Often a special control is required in psychological studies. Suppose, for example, an investigator wanted to test a drug intended to reduce anxiety. She would find some anxious subjects, administer specific dosages of the drug in the form of pills, and then test for reduced anxiety levels on such measures as self-reported tension or ability to cope with stress. But the subjects' improvement on these measures might reflect little more than their hopes and expectations that the drug would help them. Therefore, it is important to have at the same time another group, this one consisting of subjects who take an inactive substance, called a **placebo**, instead of the active drug. In the **single-blind method** the subjects do not know whether they are receiving the active treatment or some control treatment such as a sugar pill that looks like the real drug but is inert (inactive).

Of course, experimenters, just like subjects, may also be biased by their own hopes and expectations. For example, the researcher who wants to prove the value of a new drug for reducing anxiety might be fooled into seeing improvement where there is none. To avoid this type of error, the experimenter must not know which subjects receive the real treatment and which ones serve as placebo controls. She might employ an independent third party to keep track of which subjects receive which treatment. The method of keeping the experimenter as well as the subject ignorant of the group to which each subject is assigned is called the **double-blind method**.

To assess the effect of an experimental treatment, the researcher compares the results obtained with the experimental group (the one that actually received the treatment) with the results obtained from the control group. Suppose there is a difference, and the average score in the experimental group is, say, five points higher than the average score in the control group. What may one conclude? Very little, unless one can be sure that this difference is greater than the difference that would be expected just on the basis of chance. For example, if you correctly predicted how a tossed coin would land a few times, you could still not conclude that you had a special ability to predict heads or tails unless you could demonstrate your skill at a level that was clearly greater than chance. It is the same in experimentation: The differences found between experimental groups and controls must be shown to exceed chance. Statistics are used to calculate quantitative estimates of the degree to which a given finding or difference reflects more than a chance effect—in short, the degree to which it is *statistically significant*. Even if a finding is beyond chance, however, the psychologist needs to evaluate its strength or power. For example, given that a particular treatment decreases fear more than no treatment at all, how powerful is it? Statistical analyses can help evaluate the impact of particular experimental variables and judge their relative strength as well as their occurrence at a level significantly beyond chance. Some of the main terms used in psychological research are summarized in Table 1.4.

Table 1.4
The Language of Personality Research

| Term | Definition |
|--------------------------|---|
| Variable | Any attribute or quality that can be given two or more values, such as degree of friendliness. |
| Correlation | The degree of relationship or association between two or more variables. For example, the degree to which people who are friendly in one situation are likely to be friendly in another situation. |
| Independent variable | The event, condition, or treatment that is systematically varied by the experimenter. |
| Dependent variable | A measure of the response to the independent variable. |
| Control (control group) | The condition against which the effects of the experimental treatment are compared. For example, the control subjects might receive an inert substance while those in the experimental group get a drug. |
| Randomization | The distribution of subjects into different groups (experimental or control) on a purely chance or random basis. |
| Single-blind technique | A method in which subjects are not informed of the group or treatment into which they have been placed. This is done so that subjects in different groups will have comparable expectations about the study. |
| Double-blind technique | In this method neither the subjects nor the experimenters know the group or treatment to which subjects are assigned. For example, neither the subjects nor the experimenters know who received the real drug or the inert substance until all the data have been collected and recorded. |
| Statistical significance | An effect, relationship, or difference that significantly exceeds that which might be expected by chance (as shown by a statistical test). |

Differences between Groups: But Are They “Significant”?

In sum, psychologists must routinely decide whether a difference found between two or more groups is “significant” or whether it is merely the result of chance. The two groups being compared may be preselected to differ in some characteristic, like sex, birth order, or socioeconomic class; or individuals may be assigned at random to

groups that receive different instructions, drugs, experiences of success or failure, or other treatment. The performances of these groups on some criterion (measure or standard) are then compared. If descriptive statistics suggest that there are differences, inferential statistics are used to help determine the degree to which the results reflect more than chance, or random, differences.

If first-born children in a sample of families score higher on IQ tests than later-born children, can we conclude that first-born children are brighter than later-born children? Or suppose that children instructed to “think happy” while waiting for a reward are able to wait longer than those in groups instructed to “think sad” or given no instructions at all. Is the difference in waiting times between the two groups greater than might be expected by chance?

Statistical tests of significance help to answer such questions; they indicate how trustworthy the differences between groups are. If, for example, the average delay times for groups of children given different instructions on what to think about during the interval are large enough, it is reasonable to assume that they are probably not the result of chance inclusion in one group of more children who would delay regardless of their instructions. Statistical tests of significance tell us how large the differences must be before we can conclude that they have not occurred by chance. To answer such questions, statistics are used to test the significance of an observed difference between the means of two groups. Whether or not the difference is significant—that is,



Concealed video cameras and one-way mirrors allow unobtrusive observation by researchers who remain unseen by participants.

beyond chance—depends not only upon the size of this mean difference but also upon the variation (variability) in the scores being compared.

For example, a sample of girls may be more “dependent” (in mean scores) than boys on a measure of “help seeking.” But, if the variability *within* each sex is very high (and some boys are much more dependent than some girls), the difference in means may not be significant. On the other hand, even if the mean difference between the sexes is small, it still may be highly significant if the variability within each group is very small.

Statistics are used to estimate the probability that the obtained difference between the means of the groups is due to chance. The resulting probability is expressed as a *p* value; it indicates the number of times that the obtained effect or difference might be expected by chance. For example, a *p* of .05 indicates that the result would be expected by chance 5 times in 100 (or 1 chance in 20). It is conventionally agreed by researchers that a *p* smaller than .05 ($p < .05$) will be considered statistically significant, while a *p* larger than .05 ($p > .05$) is not going to be considered a reliable, beyond-chance finding. Obviously, the smaller the *p* value, the greater the confidence that an effect is really significant. A *p* of .001, for example, indicates that the result would be expected by chance only once in 1,000 times, while a *p* of .10 means that there is only 1 chance in 10 that the effect is merely accidental.

Naturalistic Observation: Moving out of the Lab

Often experimentation is not possible or not desirable. Just as astronomers cannot manipulate the actions of heavenly bodies, psychologists often cannot—or should not—manipulate certain aspects of human behavior. For example, one could not or would not create home environments in which children become delinquent or marital conflicts are provoked. Although such phenomena cannot be manipulated as independent variables, often they can be observed closely and systematically. Ethical considerations often prevent psychologists from trying to create powerful, lifelike experimental treatments in the laboratories (see Consent Form, Figure 1.5).

Even when some variables can be manipulated, the investigator often prefers to observe behavior as it naturally occurs, without any scientific interference. Some of the most informative work using this method, called *naturalistic observation*, comes from students of animal behavior, who unobtrusively observe the moment-by-moment lives of such animals as chimpanzees in their natural environment. Such methods have been adapted to study families interacting in their own homes (Patterson, 1990). In a somewhat similar fashion, but usually on a smaller scale, unseen observers may study children from behind a one-way mirror in such settings as a playroom or a preschool class (Mischel, Shoda, & Rodriguez, 1989). Of course, observation is a commonplace method in everyday life; through observation we form impressions and learn about events and people. The distinguishing feature of observation as a scientific tool is that it is conducted as precisely, objectively, and systematically as possible.

CONSENT FORM

FOR PARTICIPATION IN AN EXPERIMENT IN _____
 PSYCHOLOGY IN THE LABORATORY OF _____

1. In this experiment, you will be asked to
2. The benefit we hope to achieve from this work
3. The risks involved (if any)

CONSENT AGREEMENT

I have read the above statement and am consenting to participate in the experiment of my own volition. I understand that I am free to discontinue my participation at any time without suffering disadvantage. I understand that if I am dissatisfied with any aspect of this program at any time, I may report grievances anonymously to _____

Signed: _____
 Date: _____

Figure 1.5
A Typical Consent Form for Participation in a Psychological Study. Ethical Standards Require That Participation in Research Come Only After Volunteers Understand the Task and Freely Consent

Sampling Daily Life Experiences

In recent years, many personality researchers have moved outside the lab to study people's daily experiences by obtaining their self-reported reactions to daily experiences that cannot be observed directly (Tennen, Suls, & Affleck, 1991). A good example is found in studies that ask for reports of positive and negative mood experienced in daily life (Diener, Smith, & Fujita, 1995). Studies like these use various types of self-

Table 1.5
Illustrative Methods for Sampling Daily Life Experiences

| Method | Examples | Source |
|--|--|---|
| Preprogrammed time samples | Digital watch alarm signals time for subjects to record their tasks, behavior, and perceptions at the moment | Cantor, Norem, Langston, Zirkel, Fleeson, & Cook-Flanagan, 1991 |
| Systematic diaries | Self-reports of reactions to daily stressors (e.g., overload at work, family demands, arguments) | Bolger & Schilling, 1991 |
| Sampling emotions, symptoms, and other internal states | Self-ratings of emotional states (e.g., pessimistic–optimistic, full–hungry); occurrence and duration of symptoms (e.g., backache, headache); reported personal strivings and well-being | Larsen & Kasimatis, 1991; Emmons, 1991; Diener et al., 1995; David et al., 1997 |

recording and self-reports by subjects to sample daily events and emotional reactions to them as they occur in everyday life (see Table 1.5). For example, they use daily mood measures on which subjects indicate the degree to which they experienced various emotions (such as enjoyment/fun, pleased; depressed/blue) in each reporting period (Larsen & Kasimatis, 1991). Such reports can be linked to other aspects of

IN FOCUS 1.3 *Locating the Case of Gary in the Text for Each Approach*

Because material on Gary occurs wherever it is relevant to a particular approach, it appears in many places within the text. To help the reader find Gary W. within the context of each approach, the location of case materials and interpretations for him throughout the book is summarized in this *In Focus*. Students with an interest in the individual personality and in clinical psychology may wish to consult this material to view it as a whole in order to gain perspective on all the approaches to the same person. Such an overview of the differences among approaches in studying the same individual will be most meaningful after completing a reading of the text.

The chapters indicated contain case material and interpretations about the same case, Gary W., who will be

assessed and conceptualized with the methods and concepts distinctive to each major approach to personality.

| Approach | Location |
|------------------|------------|
| Psychodynamic | Chapter 4 |
| Trait-Biological | Chapter 7 |
| Phenomenological | Chapter 11 |
| Behavioral | Chapter 13 |
| Social Cognitive | Chapter 18 |

Case Studies: Gary W., the Text's Case

Finally, in *case studies* the focus is on one individual assessed intensively. A variety of data sources may be used to study the person. For example, interviews, questionnaires, tests, observations, and diaries may be included. The study may deal with just one aspect of a person's life (reactions to divorce, for example) or may try to provide broad coverage of long periods or even an entire life.

In this text you will learn about the case method through an actual case, "Gary W." Gary's personality and the information made available about him is based on his clinical files but was modified sufficiently in order to protect confidentiality. The case will be used to provide concrete examples of how clinical psychologists, working within each of the major theoretical approaches presented in the text, conceptualize the same individual in their own terms, drawing on their own preferred methods. Therefore, the text presents not only information obtained directly from Gary but also a conceptualization of his personality written by psychologists from each perspective, using the methods and concepts they prefer. The placement of these case materials and interpretations in the text is shown in *In Focus 1.3*.

Methods like those described in this section are essential for the scientific study of persons, but they are merely the tools in the service of ideas. Throughout this text these ideas will be presented, followed by the methods used to explore their implications and the findings they yielded.

experience, such as minor illnesses and psychological well-being (e.g., Emmons, 1991). Likewise, daily reports of everyday reactions to various stressors and hassles, such as interpersonal conflicts at home, can be related to other measures of personality (Bolger & Schilling, 1991; David, Green, Martin, & Suls, 1997). Experience samples also are used to study reactions to common life problems such as adjusting to college life in terms of such personal tasks as getting good grades and making friends (e.g., Cantor et al., 1991).

SUMMARY

1. To psychologists, personality is a field of study rather than a particular aspect of people. Personality psychology is a field of great breadth. It overlaps with

the neighboring areas of human development, creativity and abnormality, emotions, cognition, learning, and social relations. This book is an introduction to

the field of personality. It surveys personality theories and their applications, as well as personal adaptation and basic coping processes.

2. Traditionally, much attention has been devoted to theories about human nature. Personality theories differ in their degree of emphasis on the past and the present, the conscious and the unconscious, the directly observable and the relatively unobservable. The essence of a scientific approach to personality is to test various ideas, to evaluate the evidence supporting them, and to seek better ones. It is this potential testability of personality theory that differentiates a science of personality from the simple assertion of opinions or beliefs.

3. Complex human behavior has many determinants. It is the result of the interaction among various qualities in the person and the situation, often over long periods of time. Information about various types of determinants from many alternative perspectives helps to improve our total understanding. Sometimes, however, different approaches to personality come into conflict, and it is from such conflict that progress in science is often stimulated.

4. Specific personality theories have stimulated more general approaches to personality that can be grouped into five major categories. This text is organized into parts that present, in sequence, these five approaches: psychodynamic, trait and biological, phenomenological, behavioral, and cognitive social. Each approach provides basic concepts as well as strategies for seeking information about people and for changing maladaptive behavior in constructive ways. The successes achieved by these applications and the research they generated reflect the value (and limitations) of the personality concepts that guide them. Contemporary personality research investigates psychological differences among individuals and the processes that underlie them.

5. Different approaches favor different methods; each has distinct uses for getting particular types of information. Paper-and-pencil tests, interviews, performance in special situations, and physiological measures and other nonverbal responses are all

among the sources of information used. Regardless of its source, any information may be treated as a variable, which is defined as a characteristic or quality that can be given two or more noticeably different values, such as high and low.

6. Individual differences were illustrated in a study of how obese versus normal-weight individuals react emotionally to the same situation. The obese individuals reported more emotionality than normal subjects when listening to emotionally disturbing material but less when listening to neutral material.

7. A correlation is an expression of the relationship between two variables (for example, the association between people's height and their weight). When the correlation is zero, there is no relationship between the two variables. In a positive correlation, the variables are related in such a way that a high value for one is associated with a high value for the other. In a negative correlation, a high value for one variable is associated with a low value for the other.

8. Statistical techniques are needed to evaluate whether or not the relationship between two or more variables is statistically significant—that is, greater than would be expected by chance. If two variables are significantly related, then a prediction may be made about one on the basis of knowledge of the other. Correlations, however, cannot provide an answer to the question of cause and effect. Two variables may be associated even though neither one causes the other.

9. In the experiment, the basic method of science, the researcher systematically manipulates one treatment or variable while holding all other conditions constant. The group that receives the treatment or is exposed to this one variable is called the “experimental group” (treatment group). A “control group” does not receive the treatment so that it can serve as a comparison. The assignment of subjects to experimental or control groups is usually done at random to avoid bias (any difference between groups in any respect other than the experimental variable).

10. An independent variable is the variable or treatment that is administered systematically by the experimenter, independently of the subject's behavior. The dependent variable is the subject's response to the independent variable. A placebo is an inert substance that may be given to control group subjects in an experiment testing the efficacy of a drug. In the single-blind method, subjects do not know whether they are in the control or experimental group. In the double-blind method, neither the experimenter nor the subjects know who is in the treatment or control groups.

11. In recent years many personality researchers have moved outside the lab and devised measures to study experiences and behaviors as they unfold. These methods include daily diary records and self-reports of emotional reactions, symptoms, and other behavior as they occur. Case studies provide another useful tool for studying persons in depth. The case study of Gary W. will be used to illustrate the five major approaches throughout the text. Each approach provides different types of information about Gary, and each views him in terms of its own conception of personality and has its favorite methods.