

CHAPTER 2

Explaining Drug Use and Abuse

Did You Know?

- Contrary to public perception, addiction is a complex disease.
- Most drugs of abuse include both physical and psychological addictions.
- The prevailing concept or model of addiction in America is the disease model.
- Drug addiction develops as a process and not as a sudden occurrence.
- There exists an excessive amount of variation in values and attitudes regarding drug use.
- Like the United States, nearly all other countries are experiencing increasing amounts of drug use within certain subcultures of people who use or abuse drugs.
- Every culture has experienced problems with drug use or abuse. As far back as 2240 B.C., Hammurabi, the Babylonian king and lawgiver, addressed the problems associated with excessive use of alcohol.
- Today, drugs are more potent than they were years ago.
- Drug use and especially drug dealing are becoming major factors in the growth of crime among the young.
- Seven in 10 drug users work full-time.
- According to biological theories, drug abuse has an innate physical beginning stemming from physical characteristics that cause certain individuals either to experiment with or to crave drugs to the point of abuse.
- Abuse of drugs by some people may represent an attempt to relieve underlying psychiatric disorders.
- “Addiction to pleasure” theory assumes that it is biologically normal to continue a pleasure stimulus (such as drug use), once begun.
- A strong relationship exists between severe drug addiction and mental illness.
- Sigmund Freud believed that addiction to drugs was an outgrowth of habitual (compulsive) masturbatory activity.
- Such personality traits as extreme forms of introversion and extroversion may explain why many people abuse drugs.
- Drug use is generally learned from others.
- When drug use becomes consistent and habitual, it usually occurs in the peer group setting, with people we like.
- No single theory can explain why most people use drugs.
- Some theories advocate that an individual’s alliance with drug-using peers largely results from an inability to cope with rapid societal change.
- People who perceive themselves as drug users are more likely to develop serious drug abuse problems.

Learning Objectives

On completing this chapter you will be able to:

- ⊙ List three to five major contributing factors responsible for addiction.
- ⊙ List and briefly explain three models used to describe addiction.
- ⊙ List six reasons why drug use or abuse is a more serious problem today than it was in the past.
- ⊙ List and briefly describe the genetic and biophysical theories that biologically explain how drug use often leads to abuse.
- ⊙ Explain how drugs of abuse act as positive reinforcers.
- ⊙ Explain the relationships between some mental disorders and possible effects of certain drugs.
- ⊙ Explain four ways that genetic factors directly or indirectly contribute to drug abuse.
- ⊙ Explain the relationship between introverted or extroverted personality patterns and possible effects of stimulants or depressants.
- ⊙ Briefly define and explain reinforcement or learning theory and some of its applications to drug use and abuse.
- ⊙ List and briefly describe the four sociological theories broadly known as social influence theories.
- ⊙ Describe symptoms and indicators of possible drug use or abuse in childhood behavior patterns.
- ⊙ List and describe three factors in the learning process that Howard Becker believes first-time users go through before they become attached to using illicit, psychoactive drugs.
- ⊙ Define the following concepts as they relate to drug use: primary and secondary deviance, master status, and retrospective interpretation.
- ⊙ Explain how Reckless's containment theory accounts for the roles of both internal and external controls regarding the attraction to drug use.
- ⊙ Understand how making low-risk and high-risk drug choices directly affects drug use.



Drugs and Society Online is a great source for additional drugs and society information for both students and instructors. Visit <http://drugsandsociety.jbpub.com> to find a variety of useful tools for learning, thinking, and teaching.

Introduction

CHAPTER 1 PROVIDED AN OVERVIEW OF DRUG USE. In this chapter, we focus on the major explanations of drug use and/or abuse. The questions we explore are these: Why would anyone voluntarily consume drugs when they are not medically needed or required? Why are some people attracted to altering their minds? Why are others uneasy and uncomfortable with the euphoric effects of recreational drug use? Why do people subject their bodies and minds to the harmful effects of repetitive drug use, eventual addiction, and relapse back into drug use? What logical reasons could explain such apparently irrational behavior?

Following are three perspectives regarding drug use.

First perspective:

Yes, I use a lot of drugs. I like the high from weed [marijuana], the buzz from coke [cocaine], and liquor also. I like psychedelic drugs but can't do them often because one, they are harder to get, and two, I work all the time and go to school at night. Psychedelics require big-time commitment and I just don't have that amount of time anymore to play around with intense mind trips. I think I am biologically attracted to drugs. What else would explain the desire to get high all the time? Some of my friends are worse than me. They don't just hang with the desire to continually want to get high, they just do it. One friend of mine does not accomplish much; my other two friends are coke addicts but they say they are not addicted, they claim to just like it. I don't think a day goes by, unless I am sick with the flu or something, that I don't get at least a little buzzed on some drug. My wife does not do any drugs, but hey, she's cool with my drug use as long as I keep working every day. *(From Venturelli's research files, graduate student and full-time insurance claims adjuster, age 28, July 12, 2000.)*

Second perspective:

You are asking the wrong person about drug use. I am against such drugs as marijuana, cocaine, tobacco, and LSD. My friends feel

the same. I occasionally drink when I am with friends or at a party, but even one or two drinks make me feel out of it. I just don't like to feel as if I am losing control of reality, I like reality too much. . . . I think people who use drugs liberally are in some way addicted to the feeling of being high. They are not aware of how great it is to be in control of their thinking. *(From Venturelli's research files, male graduate university student, age 28, March 6, 1996.)*

Third perspective:

Yes, I have friends who try to tell me to slow down when we are smoking weed and drinking. I just like to get high until I am about to pass out. If I could, I would be high all day without any time out. Never think about quitting or slowing down when it comes to drugs. The only time I am happy is when I am completely zonked out. I guess I am a little attached to these drugs — I am addicted to them! *(From Venturelli's research files, male public high school student in a small Midwestern city, age 15, September 9, 1996.)*

The preceding excerpts show extensive variations in values and attitudes regarding drug use. The perspective of the first interviewee represents a type of drug user who is powerfully attracted to drug use. He appears to believe that his attraction to drugs has a biological basis and he wants to feel the effects of drugs on a daily basis. The perspective of the second interviewee represents a type of user who shuns any alteration of his reality. Finally, the perspective of the third interviewee represents a type of drug user who is unaware of the pitfalls of drug addiction and is recklessly involved with substance abuse. These three views represent only a small fraction of the reasons and motivations that push people to either use or not use drugs.

Why the differences in drug use? In this chapter, we offer answers to this question by examining the motivations underlying drug use. We offer different major theoretical explanations about what causes people to initially use and often eventually abuse drugs.

To accomplish these goals, this chapter frames these and literally dozens of other perspectives

within the major biological, psychological, and sociological perspectives. Similar to the United States, nearly all other countries are experiencing increasing amounts of drug use within certain subcultures. Moreover, as we attempt to offer major scientific and theoretical explanations for drug use, we should be able to develop a much more comprehensive understanding of why drugs are so seductive, why so many people succumb, become addicted, and inflict damage to themselves and others as they become hijacked by the nonmedical use of drugs. Not only does this hold true for members of our society, but also for countless numbers of others throughout the world.

Drug Use: A Timeless Affliction

Historical records document drug use as far back as 2240 B.C., when Hammurabi, the Babylonian king and lawgiver, addressed the problems associated with drinking alcohol. Even before then, the Sumerian people of Asia Minor, who created the cuneiform (wedge-shaped) alphabet, included references to a “joy plant” that dates from about 5000 B.C. Experts indicate that the plant was an opium poppy used as a sedative (O’Brien et al. 1992).

As noted in Chapter 1, virtually every culture has experienced problems with drug use or abuse. Today’s drug use problems are part of a very long and rich tradition.

These [intoxicating] substances have formed a bond of union between men of opposite hemispheres, the uncivilized and the civilized; they have forced passages which, once open, proved of use for other purposes; they produced in ancient races characteristics which have endured to the present day, evidencing the marvelous degree of intercourse that existed between different peoples just as certainly and exactly as a chemist can judge the relations of two substances by their reactions. (Louis Lewin, *Phantasica*, in Rudgley 1993, p. 3)

The quest for explaining drug use is more important than ever as the problem continues to evolve. There are many reasons why drug use and

abuse are even more serious issues now than they were in the past:

1. From 1960 to the present, drug use has become a widespread phenomenon.
2. Today, drugs are much more potent than they were years ago. The drug content of marijuana in 1960 was 1% to 2%; today, due to new cultivation techniques, it varies from 4% to 6%.
3. Whether they are legal or not, drugs are extremely popular. Their sale is a multibillion dollar a year business, with a major influence on many national economies.
4. More so than years ago, both licit and illicit drugs are introduced and experimented with by youth at an increasingly younger age. These drugs are often supplied by older siblings, friends, and acquaintances.
5. Through the media, people in today’s society are more affected by direct advertising, especially by drug companies that are “pushing” their newest drugs. Similarly, advertisements and sales promotions (coupons) for alcohol, coffee, tea, and vitamins are targeted to receptive consumer audiences as identified through sophisticated market research.
6. Today, there is greater availability and wider dissemination of drug information. Literally thousands of web sites provide information on drug usage, chat rooms devoted to drug enthusiasts, and instructions on how to make or purchase drugs on the Internet. On a daily basis, hundreds of thousands of “spam” emails are automatically sent regarding information on purchasing OTC drugs and prescription drugs without medical authorization (medical prescription).
7. Crack and other manufactured drugs offer potent effects at low cost, vastly multiplying the damage potential of drug abuse (Inciardi et al. 1993; ONDCP 2003).
8. Drug use endangers the future of a society by harming its youth and potentially destroying the lives of many young men and women. When gateway drugs, such as alcohol and tobacco, are used at an early age, a strong probability exists that the use will progress to other drugs, such as marijuana, cocaine, and

amphetamines. Early drug use will likely lead to a lifelong habit, which usually has serious implications for the future.

9. Drug use and especially drug dealing are becoming major factors in the growth of crime rates among the young. Membership in violent delinquent gangs is growing at an alarming rate. Violent gun shootings, drive-by killings, carjacking, and “wilding” occur frequently in cities (and increasingly in small towns).
10. The fact that 7 in 10 drug users work full-time (*USA Today* 1999) increases the possibility of near or serious accidents caused by workers, especially because today we have become highly dependent on technology. For example, the operation of sophisticated machines and electronic equipment requires that workers and professionals be free of the effects of mind-altering drugs. Imagine that on a daily basis, a certain percentage of air traffic controllers are under the influence of mind-altering drugs while working or that a certain percentage of school-bus drivers are under the effects of marijuana and/or cocaine.

With remarkable and unsurpassed excellence in scientific, technological, and electronic accomplishments, one might think that in the United States, drug use and abuse would be considered irrational behavior. One might also think that the allure of drugs would diminish on the basis of the statistically high proportions of accidents, crimes, domestic violence and other relationship problems, and early deaths that result from the use and abuse of both licit and illicit drugs. Yet, as the latest drug use figures show (see Chapter 1), knowledge of these effects is often not a deterrent to drug use.

Considering these costs, what explains the continuing use and abuse of drugs? What could possibly sustain and feed the attraction to use mind-altering drugs? Why are drugs used when the consequences are so well documented and predictable?

In answering these questions, we need to recall from Chapter 1 some basic reasons why people take drugs:

1. People may be searching for pleasure.
2. Drugs may relieve stress or tension or provide a temporary escape for people with excessive anxieties or severe depression.
3. Peer pressure is a strong influence, especially for young people.
4. In some cases, drugs may enhance religious or mystical experiences.
5. Drugs are used for enhancing recreational pursuits such as the popular use of Ecstasy at raves and music festivals.
6. Some believe that illicit use of drugs can enhance work performance, such as the use of cocaine by stockbrokers, office workers, and lawyers.
7. Drugs can relieve pain and symptoms of an illness.

Although these reasons may indicate some underlying causes of excessive or abusive drug use, they also suggest that the variety and complexity of explanations and motivations are almost infinite. For any one individual, it is seldom clear when the drug use shifts from nondestructive use to abuse and addiction. When we consider the wide use of such licit drugs as alcohol, nicotine, and caffeine, we make the following discoveries: (1) More than 88% of the U.S. population use different types of drugs on a daily basis (Drug Strategies 1995; SAMHSA 1998); (2) more than half (53%) have tried an illicit drug by the time they finish high school; and (3) nearly four out of every five students (75%) have consumed alcohol (more than just a few sips) by the end of high school, and nearly half (47%) had done so by 8th grade (Johnston et al. 2003).

Further, as we will see in later chapters, some drugs can mimic many of the hundreds of moods people can experience. We can, therefore, begin to understand why the explanations for drug use and abuse are multiple and depend on both socialization experiences and biological differences. As a result of these two factors, which imply hundreds of variations, explanations for drug use cannot be forced into one or two theories.

Researchers have tackled the drug use and abuse question from three major theoretical positions: biological, psychological, and sociological perspectives. Although the remainder of this chapter discusses these three major types of theoretical explanations, before delving into them, we begin with a discussion of the motivation or “engine” responsible for the consistent attraction to rec-

reational and/or nonmedical use of drugs — namely, addiction.

The Origin and Nature of Addiction

Humans can develop a very intense relationship with chemicals. Most people have chemically altered their mood at some point in their lives, if only by consuming a cup of coffee or a glass of white wine, and a majority do so occasionally. Yet for some individuals, chemicals become the center of their lives, driving their behavior and determining their priorities, even to the point at which catastrophic consequences to their health and social well-being ensue. Although the word *addiction* is an agreed-upon term referring to such behavior, little agreement exists as to the origin, nature, or boundaries of the concept of addiction. It has been classified as a very bad habit, a failure of will or morality, a symptom of other problems, or a chronic disease in its own right.

Although public perception of drug abuse and addiction as a major social problem has waxed and waned over the past 20 years, the social costs of addiction have not: The total criminal justice, health, insurance, and other costs in the United States are roughly estimated at \$90 to \$185 billion annually, depending on the source. Despite numerous prevention efforts, the “War on Drugs,” and a falloff in the heavy drug use of the 1960s and 1970s, lessons learned in one decade seem to quickly pass out of awareness.

For example, the rate of lifetime use of any illicit drug other than marijuana among 12th graders in 1991 was approximately 27%; in 2004, it had increased to approximately 29% (Johnston et al. 2004). For marijuana, the highest initiation rates are now seen in grades 7 through 11, although in 2003 6.1% of 8th graders reported that they had tried marijuana by the end of 6th grade (Johnston et al. 2003). Another study found that more than one-fourth (28%) of high school students had consumed more than a few sips of alcohol before age 13, compared to 18% who had smoked a whole cigarette and 10% who had tried marijuana *before* that age (CDCP 2004). From these major studies, it is apparent that both licit and illicit types of drugs

continue to penetrate into increasingly younger age groups.

Defining Addiction

Addiction can be described as a complex disease. In 1964, the World Health Organization (WHO) of the United Nations defined it as “a state of periodic or chronic intoxication detrimental to the individual and society, which is characterized by an overwhelming desire to continue taking the drug and to obtain it by any means” (pp. 9–10). Accordingly, addiction is characterized as compulsive, at times uncontrollable, drug craving, seeking, and use that persist even in the face of extremely negative consequences (NIDA 1999). This relentless pursuit of a drug of choice occurs despite the fact that the drug is usually harmful and injurious to bodily and mental functions.

The word *addiction*, derived from the Latin verb *addicere*, refers to the process of binding to things. Today, the word largely refers to a chronic adherence to drugs. This can include both physical and psychological dependence. *Physical dependence* is the body’s need to constantly have the drug or drugs, and *psychological dependence* is the mental inability to stop using the drug or drugs.

The *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (*DSM-IV-TR*), published by the American Psychiatric Association (2000), differentiates among intoxication by, abuse of, and addiction to drugs. Although *substance abuse* is considered maladaptive, leading to recurrent adverse consequences or impairment, it is carefully differentiated from true addiction, called *substance dependence*, the essential feature of which is continued use despite significant substance-related problems known to the user. Many of the following features are usually present:

- **Tolerance.** The need for increased amounts or diminished effect of same amount.
- **Withdrawal.** The experience of a characteristic withdrawal syndrome for the specific substance, which can be avoided by taking closely related substances. Unsuccessful attempts to cut down.
- **Compulsive.** An increasing amount of time spent in substance-related activities, such as obtaining, using, and recovering from its effects.

Models of Addiction

Various models attempt to describe the essential nature of drug addiction. Newspaper accounts of “inebriety” in the 19th and early 20th centuries contain an editorializing undertone that looks askance at the poor morals and lifestyle choices followed by the inebriate. This view has been termed the **moral model**, and although it may seem outdated from a modern scientific standpoint, it still characterizes an attitude among many traditional North Americans and members of many ethnic groups.

The prevailing concept or model of addiction in America is the **disease model**. Most proponents of this concept specify addiction to be a chronic and progressive disease, over which the sufferer has no control. This model originated in part from research performed by Jellinek, one of the founders of addiction studies (1960), among members of Alcoholics Anonymous (AA). He observed a seemingly inevitable progression in his subjects, which

they made many failed attempts to arrest. This philosophy is currently espoused by the recovery fellowships of AA and Narcotics Anonymous (NA) and the treatment field in general. It has even permeated the psychiatric and medical establishments’ standard definitions of addiction. There are many variations within the broad rubric of the disease model. This model has been bitterly debated: viewpoints range from fierce adherence to equally fierce opposition, with intermediate views casting the disease concept as a convenient myth (Smith et al. 1985).

Those who view addiction as another manifestation of something gone awry with the personality system adhere to the **characterological or personality predisposition model**. Every school of psychoanalytic, neopsychoanalytic, and psychodynamic psychotherapy has its specific “take” on the subject of addiction (Frosch 1985). Tangentially, many addicts are also diagnosed with **personality disorders** (formerly known as “character disorders”), such as impulse control disorders and sociopathy. Although few addicts are treated by **psychoanalysis** or psychoanalytic psychotherapy, a characterological type of model was a formative influence on the drug-free, addict-run, “therapeutic community” model, which uses harsh confrontation and time-extended, sleep-depriving group encounters. People who follow the therapeutic community model conclude that addicts must have withdrawn behind a **“double wall” of encapsulation**, where they failed to grow, making such techniques necessary.

Others view addiction as a “career,” a series of steps or phases with distinguishable characteristics. One career pattern of addiction includes six phases (Clinard and Meier 1992; Waldorf 1983):

1. Experimentation or initiation
2. Escalation (increasing use)
3. Maintenance or “taking care of business” (optimistic use of drugs coupled with successful job performance)
4. Dysfunction or “going through changes” (problems with constant use and unsuccessful attempts to quit)
5. Recovery or “getting out of the life” (arriving at a successful view about quitting and receiving drug treatment)
6. Ex-addict (having successfully quit)

KEY TERMS

moral model

the belief that people abuse alcohol because they choose to do so

disease model

the belief that people abuse alcohol because of some biologically caused condition

characterological or personality predisposition model

the view of chemical dependency as a symptom of problems in the development or operation of the system of needs, motives, and attitudes within the individual

personality disorders

a broad category of psychiatric disorders, formerly called “character disorders,” that includes the antisocial personality disorder, borderline personality disorder, schizoid personality disorder, and others; these serious, ongoing impairments are difficult to treat

psychoanalysis

a theory of personality and method of psychotherapy originated by Sigmund Freud, focused on unconscious forces and conflicts and a series of psychosexual stages

“double wall” of encapsulation

an adaptation to pain and avoidance of reality, in which the individual withdraws emotionally and further anesthetizes himself or herself by chemical means

Factors Contributing to Addiction

Many, perhaps millions, of individuals use or even occasionally abuse drugs without compromising their basic health, legal, and occupational status and social relationships. Why do a significant minority become caught up in abuse and addictive behavior? The answer stems from the fact that many (i.e., not a single) factors generally contribute to an individual becoming addicted. Table 2.1 represents a compilation of factors identified as complicit in the origin or “etiology” of addiction, taken from the fields of psychology, sociology, and addiction studies.

In addition to the social and cultural factors listed in Table 2.1, other “cultural” risk factors for development of abuse include the following:

- Drinking at times other than at meals
- Drinking alone
- Drinking defined as an antistress and anti-anxiety potion
- Patterns of solitary drinking
- Drinking defined as a rite of passage into an adult role
- Recent introduction of a chemical into a social group with insufficient time to develop informal social control over its use (Marshall 1979)

It is important to recall that the “mix” of risk factors differs for each person. It varies according to social, cultural, and age groups and individual and family idiosyncrasies. Most addiction treatment professionals believe that it is difficult, if not impossible, to tease out these factors before treatment, when the user is still “talking to a chemical,” or during early treatment, when the brain and body are still recuperating from the effects of long-term abuse. Once a stable sobriety is established, one can begin to address any underlying problems. An exception is the mentally ill chemical abuser, whose treatment requires special considerations from the outset.

In addition to the factors just listed, a number of age-dependent stressors and conflicts sometimes promote drug misuse. Risk factors that apply especially to adolescents include the following:

- Peer norms favoring use
- Misperception of peer norms (users set the tone)

- Power of age group (peer norms versus other social influences)
- Conflicts that generate anxiety or guilt, such as dependence versus independence, adult maturational tasks versus fear, new types of roles versus familiar safe roles
- Teenage risk taking, sense of omnipotence or invulnerability
- Use defined as a rite of passage into adulthood
- Use perceived as glamorous, sexy, facilitating intimacy, fun, and so on

Risk factors that apply especially to middle-aged individuals include the following:

- Loss of meaningful role or occupational identity due to retirement
- Loss, grief, or isolation due to loss of parents, divorce, or departure of children (“empty nest syndrome”)
- Loss of positive body image
- Disappointment when life expectations are not met

Even in each of these age groups, a mix of factors is at play. The adolescent abuser might have risk factors that were primarily neurological vulnerabilities, such as undiagnosed attention deficit hyperactivity disorder. Alternatively, he or she may experience failure and rejection at school, disappoint his or her parents, or be labeled odd, lazy, or unintelligent (Kelly and Ramundo 1993).

In response to the information presented in Table 2.1, a student who was a recovering alcoholic commented: “You’re an alcoholic because you drink!” He had a good point: The mere presence of one, two, or more risk factors does not create addiction. Drugs must be available, they must be used, and they must become a pattern of adaptation to any of the many painful, threatening, uncomfortable, or unwanted sensations or stimuli that occur in the presence of genetic, psychosocial, or environmental risk factors. Prevention workers often note the presence of multiple messages encouraging use: the medical use of minor tranquilizers to offset any type of psychic discomfort; the marketing of alcohol as sexy, glamorous, adult, and facilitative of social interaction; and so forth.

Table 2.1 Risk Factors for Addiction

RISK FACTOR	LEADING TO THIS EFFECT
Biologically Based Factors (genetic, neurological, biochemical, and so on)	
• A less subjective feeling of intoxication	• More use to achieve intoxication (warning signs of abuse absent)
• Easier development of tolerance; liver enzymes adapt to increased use	• Easier to reach the addictive level
• Lack of resilience or fragility of higher (cerebral) brain functions	• Easy deterioration of cerebral functioning, impaired judgment, and social deterioration
• Difficulty in screening out unwanted or bothersome outside stimuli (low stimulus barrier)	• Feeling overwhelmed or stressed
• Tendency to amplify outside or internal stimuli (stimulus augmentation)	• Feeling attacked or panicked; need to avoid emotion
• Attention deficit hyperactivity disorder and other learning disabilities	• Failure, low self-esteem, or isolation
• Biologically based mood disorders (depression and bipolar disorders)	• Need to self-medicate against loss of control or pain of depression; inability to calm down when manic or to sleep when agitated
Psychosocial/Developmental “Personality” Factors	
• Low self-esteem	• Need to blot out pain; gravitation to outsider groups
• Depression rooted in learned helplessness and passivity	• Need to blot out pain; use of a stimulant as an antidepressant
• Conflicts	• Anxiety and guilt
• Repressed and unresolved grief and rage	• Chronic depression, anxiety, or pain
• Post-traumatic stress syndrome (as in veterans and abuse victims)	• Nightmares or panic attacks
Social and Cultural Environment	
• Availability of drugs	• Easy frequent use
• Chemical-abusing parental model	• Sanction; no conflict over use
• Abusive, neglectful parents; other dysfunctional family patterns	• Pervasive sense of abandonment, distrust, and pain; difficulty in maintaining attachments
• Group norms favoring heavy use and abuse	• Reinforced, hidden abusive behavior that can progress without interference
• Misperception of peer norms	• Belief that most people use or favor use or think it’s “cool” to use
• Severe or chronic stressors, as from noise, poverty, racism, or occupational stress	• Need to alleviate or escape from stress via chemical means
• “Alienation” factors: isolation, emptiness	• Painful sense of aloneness, normlessness, rootlessness, boredom, monotony, or hopelessness
• Difficult migration/accluturation with social disorganization, gender/generation gaps, or loss of role	• Stress without buffering support system

The Vicious Cycle of Addiction

First, the man takes a drink, then the drink takes a drink, then the drink takes the man.

(Traditional Chinese proverb)

Drug addiction develops as a process: It is not a sudden occurrence. The body makes simple physiological adaptations to the presence of alcohol and other drugs. For instance, brain cell tolerance and increased metabolic efficiency of the liver can develop, necessitating consumption of more of the chemical to achieve the desired effect. Physical dependence can also develop, in which cell adaptations cause withdrawal syndromes to occur in the absence of the chemical.

Other factors can promote the cycle of addiction. For instance, abuse impairs cerebral functioning, including memory, judgment, behavioral organization, ability to plan, ability to solve problems, and motor coordination. Thus, poor decision making, impaired and deviant behavior, and overall dysfunction result in adverse social consequences, such as accidents, loss of earning power and relationships, and impaired health. Such adverse social and health consequences cause pain, depression, and lowered self-esteem, which may result in further use of the drug as an emotional and physical anesthetic. The addict often adapts to this chronically painful situation by erecting a defense system of denial, minimization, and rationalization; the chemical blunting of reality may exacerbate this denial of reality. It is unlikely, at this point, that the addict or developing addict will feel compelled to cease or cut back on drug use on his or her own (Tarter et al. 1983).

Family, friends, and colleagues often unwittingly “enable” the maintenance and progression of addiction by making excuses for addicts, literally and figuratively bailing them out, taking up the slack, denying and minimizing their problems, and otherwise making it possible for addicts to avoid facing the reality and consequences of what they are doing to themselves and others. Although these friends may be motivated by simple naïveté, embarrassment, or misguided protectiveness, there are often hidden gains in taking up this role, known popularly as “codependency” (Beattie 1987). Varieties of cultural and organizational factors also

operate in the workplace or school that allow denial of the existence or severity of abuse or dependency. This triad of personal denial, peer and kin denial and codependency, and institutional denial represents a formidable impediment to successful intervention and recovery (Myers 1990).

Nondrug Addictions?

The addictive disease model and the 12-step recovery model followed by AA and NA have seemed so successful for both addicts and their families and friends that other unwanted syndromes have been added to the list of “addictions.” The degree to which the concept of addiction fits these syndromes varies. Gambling, for example, shows progressive worsening, loss of control, relief of tension from the activity, and continuance despite negative (often disastrous) consequences experienced by the addicted gambler. Some recovering gamblers even claim to have experienced a form of withdrawal. Gamblers Anonymous is a fellowship that has formed to assist its members. Clearly, gambling as an activity has much in common with chemical addictions, but it is debatable whether it belongs in the category of addiction (the *DSM-IV* does not include it, for example).

Many other groups have followed in the footsteps of Gamblers Anonymous, including those related to eating (Overeaters Anonymous) and sexual relationships (The Augustine Fellowship, Sex and Love Addicts Anonymous). In recent years, any excessive or unwanted behaviors, including excess shopping, chocolate consumption, and even



Gambling, like drug use, can easily become addictive.

Internet use, have been labeled “addictions,” which has led to satirical reporting in the press. Addiction professionals lament the overdefinition, which they believe trivializes the seriousness and suffering of rigorously defined addictions.

Major Theoretical Explanations: Biological

As noted in Chapter 1, biological explanations have tended to use genetic theories and the disease model to explain drug addiction. The view that alcoholism is a sickness dates back approximately 200 years (Conrad and Schneider 1980; Heitzeg 1996). The disease perspective is upheld by Jellinek’s (1960) view that alcoholism largely involves a loss of control over drinking and that the drinker experiences clearly distinguishable phases in his or her drinking patterns. For example, concerning alcoholism, the illness affects the abuser to the point of loss of control. Thus, the disease model views drug abuse as an illness in need of treatment or therapy.

According to biological theories, drug abuse has a beginning stemming from physical characteristics that cause certain individuals either to experiment with or to crave drugs to the point of abusive use. **Genetic and biophysiological theories** explain addiction in terms of genetics, brain dysfunction, and biochemical patterns.

Biological explanations emphasize that the **central nervous system** (CNS) reward sensors in some people are more sensitive to drugs, making the drug experience more pleasant and more rewarding for these individuals (Khantzian; Mathias 1995). In contrast, others find the effects of drugs of abuse very unpleasant; such people are not likely to be attracted to these drugs (Farrar and Kearns 1989).

Most experts acknowledge that biological factors play an essential role in drug abuse. These factors likely determine how the brain responds to these drugs and why such substances prove addictive. It is thought that by identifying the nature of the biological systems that contribute to drug abuse problems, improved prevention and treatment methods can be developed (Koob 2000).

All the major biological explanations related to drug abuse assume that these substances exert their **psychoactive effects** by altering brain chemistry or neuronal (basic functional cell of the brain) activity. Specifically, the drugs of abuse interfere with the functioning of **neurotransmitters**, chemical messengers used for communication between brain regions (see Chapter 4 for details). The following sections detail three principal biological theories that help explain why some drugs are abused and why certain people are more likely to become addicted when using these substances.

Abused Drugs as Positive Reinforcers

Biological research has shown that stimulating some brain regions with an electrode causes very pleasurable sensations. In fact, laboratory animals would rather self-administer stimulation to these brain areas than eat or engage in sex. It has been demonstrated that drugs of abuse also activate these same pleasure centers of the brain (Weiss 1999).

It is generally believed that most drugs with abuse potential enhance pleasure centers by causing the release of specific brain neurotransmitters such as **dopamine** (Bespalov et al. 1999). Brain cells become accustomed to the presence of these neurotrans-

KEY TERMS

genetic and biophysiological theories

explanations of addiction in terms of genetic brain dysfunction and biochemical patterns

central nervous system

one of the major divisions of the nervous system, composed of the brain and the spinal cord

psychoactive effects

how drug substances alter and affect the brain’s mental functions

neurotransmitters

the chemical messengers released by nervous (nerve cells) for communication with other cells

dopamine

the brain transmitter believed to mediate the rewarding aspects of most drugs of abuse

mitters and crave them when they are absent, leading the person to seek more drugs (Spanagel and Weiss 1999). In addition, it has been proposed that overstimulation of these brain regions by continual drug use “exhausts” these dopamine systems, and leads to depression and an inability to experience normal pleasure (Volkow 1999).

Drug Abuse and Psychiatric Disorders

Biological explanations are thought to be responsible for the substantial overlap that exists between drug addiction and mental illness. Because of the similarities, severe drug dependence itself is classified as a form of psychiatric disorder by the American Psychiatric Association (see the discussion of the *DSM-IV-TR* classifications later in this chapter). For example, abuse of drugs can in and of itself cause mental conditions that mimic major psychiatric illness, such as schizophrenia, severe anxiety disorders, and suicidal depression (APA 2000). It is believed that these similarities occur as a result of common chemical factors that are altered both by drugs of abuse and during episodes of psychiatric illness (NIDA 1993). Several important potential consequences of this relationship may help us understand the nature of drug abuse problems.

1. *Psychiatric disorders and drug addiction sometimes occur simultaneously.* This conclusion is supported by the fact that substance abuse-related problems often coexist with other mental diseases such as conduct disorder, schizophrenia, and mood disorders (APA 2000). Due to the common mechanisms, drug abuse is likely to expose or worsen psychiatric illnesses, making management of these problems considerably more difficult (APA 2000).
2. *Therapies that are successful in treating psychiatric disorders may be useful in treating mental problems caused by drugs of abuse.* It is likely that many of the therapeutic lessons we learn about dealing with psychiatric illnesses can be useful in drug abuse treatment, and vice versa.
3. *Abuse of drugs by some people may represent an attempt to relieve underlying psychiatric disorders.* Such people commonly use CNS depressants

such as alcohol to relieve anxiety, whereas CNS stimulants such as cocaine are frequently used by patients with depression disorders (Grinspoon 1993). In such cases, if the underlying psychiatric problem is relieved, the likelihood of successfully treating the drug abuse disorder improves substantially.

Genetic Explanations

One biological theory receiving scrutiny suggests that inherited traits can predispose some individuals to drug addiction. Such theories have been supported by the observation that increased frequency of alcoholism and drug abuse exists among children of alcoholics and drug abusers (APA 2000; Uhl et al. 1993). Using adoption records of some 3000 individuals from Sweden, researchers Cloninger, Gohman, and Sigvardsson conducted one of the most extensive research studies examining genetics and alcoholism. They found that “. . . children of alcoholic parents were likely to grow up to be alcoholics themselves, even in cases where the children were reared by nonalcoholic adoptive parents almost from birth” (Doweiko 2002). Such studies estimate that drug vulnerability due to genetic influences accounts for approximately 38% of all cases, whereas environmental and social factors account for the balance (Uhl et al. 1993).

Other studies attempting to identify the specific genes that may predispose the carrier to drug abuse problems have suggested that a brain target site (called a receptor — see Chapter 4 for details) for dopamine is altered in a manner that increases the drug abuse vulnerability (Radowitz 2003; Wyman 1997). Studies that test for genetic factors in complex behaviors such as drug abuse are very difficult to conduct and interpret. It is sometimes impossible to design experiments that distinguish among genetic, social, environmental, and psychological influences in human populations. For example, inherited traits are known to be major contributors to psychiatric disorders, such as schizophrenia and depression. Many people with one of these illnesses also have a substance abuse disorder (APA 2000). A high incidence of an abnormal gene in a cocaine-abusing population, for example, not only may be linked to drug abuse behavior but

also may be associated with depression or another psychiatric disorder (Uhl et al. 1992).

Theoretically, genetic factors can directly or indirectly contribute to drug abuse vulnerability in several ways:

1. Psychiatric disorders that are genetically determined may be relieved by taking drugs of abuse, thus encouraging their use.
2. In some people, reward centers of the brain may be genetically determined to be especially sensitive to addictive drugs; thus, the use of drugs by these people would be particularly pleasurable and would lead to a high rate of addiction.
3. Character traits, such as insecurity and vulnerability, that often lead to drug abuse behavior may be genetically determined, causing a high rate of addiction in people with those traits.
4. Factors that determine how difficult it is to break away from drug addiction may be genetically determined, causing severe craving or very unpleasant withdrawal effects in some individuals. People with this predisposition are less likely to abandon their drug of abuse.

The genetic theories for explaining drug abuse may help us to understand the reasons that drug addiction occurs in some individuals but not in others. In addition, if genetic factors play a major role in drug abuse, it might be possible to use genetic screening to identify those people who are especially vulnerable to drug abuse problems and to help such individuals avoid exposure to these substances.

Major Theoretical Explanations: Psychological

Psychological theories mostly deal with mental or emotional states, which are often associated with or exacerbated by social and environmental factors. Psychological explanations of addiction include one or more of the following: escape from reality, boredom (Burns 1997), inability to cope with anxiety, destructive self-indulgence to the point of constantly desiring intoxicants, blind compliance with drug-abusing peers, self-destructiveness, and conscious

and unconscious ignorance regarding the harmful effects of abusing drugs. Freud established early psychological theories. He linked “primal addictions” with masturbation and postulated that all later addictions, including those involving alcohol and other drugs, were caused by ego impairments.

Freud said that drugs compensate for insecurities that stem from parental inadequacies, which themselves may cause difficulty in adequately forming bonds of friendships. He claimed that alcoholism (see Chapter 8) is an expression of the death instinct, as are self-destruction, narcissism, and oral fixations. Although Freud’s views represent interesting intuitive insights often not depicted in other theories, his theoretical concerns are difficult to observe and test, and they do not generate enough concrete data for verification.

Distinguishing Between Substance Abuse and Mental Disorders

The American Psychiatric Association has established widely accepted categories of diagnosis for behavioral disorders, including substance abuse. As standardized diagnostic categories, the characteristics of mental disorders have been analyzed by professional committees over many years and today are summarized in the *DSM-IV-TR*. In addition to categories for severe psychotic disorders and more common neurotic disorders, experts in the field of psychiatry have established specific diagnostic criteria for various forms of substance abuse. All patterns of drug abuse that are described in this text have a counterpart description in the *DSM-IV (Revised)-TR* for medical professionals. For example, the *DSM-IV (Revised)-TR* discusses the mental disorders resulting from the use or abuse of sedatives, hypnotics, or antianxiety drugs; alcohol; narcotics; amphetamine-like drugs; cocaine; caffeine; nicotine (tobacco); hallucinogens; phencyclidine (PCP); inhalants; and cannabis (marijuana). This manual of psychiatric diagnoses discusses in detail the mental disorders related to the drug use, the side effects of medications, and the consequences of toxic exposure to these substances (APA 2000).

Because of the similarities between, and the coexistence of, substance-related mental disorders

and primary psychiatric disorders, it is sometimes difficult to distinguish between the two problems. However, for proper treatment to be rendered, the cause of psychological symptoms must be determined. According to *DSM-IV* criteria, substance use (or abuse) disorders can be identified by the occurrence and consequence of dependence, abuse, intoxication, and withdrawal. These important distinguishing features of substance abuse disorders are discussed in detail in Chapter 5 and in conjunction with each drug group.

According to the *DSM-IV (Revised)-TR*, the following information can also help distinguish between substance-induced and primary mental disorders: (1) personal and family medical, psychiatric, and drug histories; (2) physical examinations; and (3) laboratory tests to assess physiological functions and determine the presence or absence of drugs. However, the possibility of a primary mental disorder should not be excluded just because the patient is using drugs — remember, many drug users use drugs to self-medicate their primary psychiatric problems. The coexistence of underlying psychiatric problems in a drug user is suggested by the following circumstances: (1) The psychiatric problems do not match the usual drug effects (e.g., use of marijuana usually does not cause severe psychotic behavior); (2) the psychiatric disorder was present before the patient began abusing substances; and (3) the mental disorder persists for more than 4 weeks after substance use ends. The *DSM-IV (Revised)-TR* makes it clear that elucidating the relationship between mental disorders and substances of abuse is important for proper diagnosis, treatment, and understanding (APA 2000).

The Relationship Between Personality and Drug Use

Since medieval times, personality theories of increasing sophistication have been used to classify long-term behavioral tendencies or traits that appear in individuals, and these traits have long been considered to be influenced by biological or chemical factors. Although such classification systems have varied widely, nearly all have shared two commonly observed dimensions of personality: in-

troversion and extroversion. Individuals who show a predominant tendency to turn their thoughts and feelings inward rather than to direct attention outward have been considered to show the trait of *introversion*. At the opposite extreme, a tendency to seek outward activity and share feelings with others has been called *extroversion*. Of course, every individual shows a mix of such traits in varying degrees and circumstances.

In some research studies, introversion and extroversion patterns have been associated with levels of neural arousal in brainstem circuits (Apostolides 1996; Carlson 1990; Gray 1987) and these forms of arousal are closely associated with effects caused by drug stimulants or depressants. Such research hypothesizes that people whose systems produce high levels of sensitivity to neural arousal may find high-intensity external stimuli to be painful and may react by turning inward. With these extremely high levels of sensitivity, such people may experience neurotic levels of anxiety or panic disorders. At the other extreme, individuals whose systems provide them with very low levels of sensitivity to neural arousal may find that moderate stimuli are inadequate to produce responses. To reach moderate levels of arousal, they may turn outward to seek high-intensity external sources of stimulation (Eysenck and Eysenck 1985; Gray 1987; Rousar et al. 1995).

Because high- and low-arousal symptoms are easy to create by using stimulants, depressants, or hallucinogens, it is possible that these personality patterns of introversion or extroversion affect how a person reacts to substances. For people whose experience is predominantly introverted or extroverted, extremes of high or low sensitivity may lead them to seek counteracting substances that become important methods of bringing experience to a level that seems bearable.

Theories Based on Learning Processes

How are drug use patterns learned? Research on learning and conditioning explains how human beings acquire new patterns of behavior by the close association or pairing of one significant reinforcing stimulus with another less significant or

neutral stimulus. Also known as **social learning theory** (Bandura 1977; explained more fully in the “Social Learning Theory” section later in this chapter), this theory emphasizes that learned associations occur in the presence of other people using drugs coupled with other, often preconceived associations with the attitudes of society and friends about drug use (Gray 1999). In this method of learning, people form expectations and become used to certain behavior patterns. This specific process of learning is known as conditioning, and it explains why pleasurable activities may become intimately connected with other activities that are also pleasurable, neutral, or even unpleasant. In addition, people can turn any new behavior into a recurrent and permanent one by the process of **habituation** — repeating certain patterns of behavior until they become established or habitual.

The basic process by which learning mechanisms can lead a person into drug use is also described in Bejerot’s **“addiction to pleasure” theory** (Bejerot 1965, 1972, 1975). This theory assumes that it is biologically normal to continue a pleasure stimulus once started. Several research findings support this theory, indicating that “a strong, biologically based need for stimulation appears to make sensation-seeking young adults more vulnerable to drug abuse” (Mathias 1995, p. 1; also supporting this view is Khantzian n.d.). A second research finding complementing this theory states, “Certain areas of the brain, when stimulated, produce pleasurable feelings. Psychoactive substances

are capable of acting on these brain mechanisms to produce these sensations. These pleasurable feelings become reinforcers that drive the continued use of the substances” (Gardner 1992, p. 43). People at highest risk for drug use and addiction are those who maintain a constant preoccupation with getting high, seek new or novel thrills in their experiences, and are known to have a relentless desire to pursue physical stimulation or dangerous behaviors and are classified as **sensation-seeking individuals**.

Drug use may also be reinforced when it is associated with receiving affection or approval in a social setting, such as within a peer group relationship. Initially, the use of drugs may not be very important or pleasurable to the individual. However, eventually the affection and social rewards experienced when drugs are used become associated with the drug. Drug use and intimacy may then become perceived as very worthwhile.

I don’t know how to explain why but an attractive part of cocaine use is the instant feeling of intimacy with others who are also snorting this drug. You just don’t want to leave the scene when the lines are cut on the glass surface and people are taking turns snorting coke. Even after I have had four or five lines and the conversation is very friendly and engaging, leaving the scene because someone is waiting for you at home or even if you have to meet with someone that night does not matter. Usually, everyone is feeling high, a lot of feelings of togetherness, and open to intimate conversation. I never saw anyone getting violent or anything like that, but I hear that it can happen especially if you have a grudge against someone before doing the coke. I think that coke just makes you more open and if you are an angry person then it will just bring it out in you. My experiences have been that everyone is just so friendly and everyone just pretends not to be overly anxious to do the next line. Actually, everyone is kind of pretending, because what they really want is more powder up their nose and an unending amount of time for talking the night away. (From Venturelli’s research files, 26-year-old male graduate student, residing in Chicago, Illinois, May 18, 2000.)

KEY TERMS

social learning theory

the theory that places emphasis on how an individual learns patterns of behavior from the attitudes of others, society, and peers

habituation

repeating certain patterns of behavior until they become established or habitual

“addiction to pleasure” theory

the theory assuming that it is biologically normal to continue a pleasure stimulus once begun

sensation seeking individuals

types of people who characteristically are continually seeking new or novel thrills in their experiences

By the conditioning process, a pleasurable experience such as drug taking may become associated with a comforting or soothing environment. When this happens, two different outcomes may result. First, the user may feel uncomfortable taking the drug in any other environment. Second, the user may become very accustomed or habituated to the familiar environment as part of the drug experience. The user may not experience the same level of rush or high in this environment and in response may take more drugs or seek a different environment.

Finally, through this process of conditioning and habituation, a drug user becomes accustomed to unpleasant effects of drug use such as withdrawal symptoms. Such unpleasant effects and experiences may become habituated — neutralized or less severe in their impact — so that the user can continue taking drugs without feeling or experiencing the negative effects of the drug.

Social Psychological Learning Theories

Other extensions of reinforcement or learning theory focus on how positive social influences by drug-using peers reinforce the attraction to drugs. Social interaction, peer camaraderie, social approval, and drug use work together as positive reinforcers to sustain drug use (Akers 1992). Thus, if the effects of drug use become personally rewarding “or become reinforcing through conditioning, the chances of continuing to use are greater than for stopping” (Akers 1992, p. 86). It is through learned expectations or association with others who reinforce drug use that individuals learn the pleasures of drug taking (Becker 1963, 1967). Similarly, if drug use leads to poor and disruptive social interactions, drug use may cease.

Note that positive reinforcers, such as peers, other friends and acquaintances, family members, and drug advertisements, do not act alone in inciting and sustaining drug use. Learning theory as defined here also relies on some variable amounts of imitation and trial-and-error learning methods.

Finally, **differential reinforcement** — defined as the ratio between reinforcers favorable and unfavorable for sustaining drug use behavior—must be

considered. The use and eventual abuse of drugs can vary with certain favorable or unfavorable reinforcing experiences. The primary determining conditions are listed here:

1. The amount of exposure to drug-using peers versus non-drug-using peers
2. The general preference for drug use in a particular neighborhood or community
3. The age of initial use (younger adolescents are more greatly affected than older adolescents)
4. The frequency of drug use among peers

Major Theoretical Explanations: Sociological

Sociological explanations for drug use share important commonalities with psychological explanations under social learning theories. The main features distinguishing psychological and sociological explanations are that psychological explanations focus more on how the internal states of the drug user are affected by social relationships within families, peers, and other close and more distant relationships, whereas sociological explanations focus on how factors external to the drug user affect drug use. Such outside forces include the types of families, adopted lifestyles of peer groups, and types of neighborhoods and communities in which avid drug users reside. The sociological perspective views the motivation for drug use as largely determined by the types and quality of bonds (attachment versus detachment) that the drug user or potential drug user has with significant others and with the social environment in general. The degree of influence and involvement with external factors affecting the individual compared with the influence exerted by internal states distinguishes sociological from psychological analyses.

As previously stated, no one biological and psychological theory can adequately explain why most

KEY TERMS

differential reinforcement

ratio between reinforcers, both favorable and unfavorable, for sustaining drug use behavior

people use drugs. People differ from one another in terms of personality, motivational factors, upbringing, learned priority of values and attitudes, and problems faced. Because of these differences, many responses and reasons exist why people take drugs, which results in a plurality of theoretical explanations. Further, the diverse perspectives of biology, psychology, and sociology offer their own explanations for drug use and abuse.

There are two sets of sociological theories: social influence and social structural. **Social influence theories** focus on microscopic explanations that concentrate on the roles played by significant others and their impact on an individual. **Structural influence theories** focus on macroscopic explanations of drug use and the assumption that the organizational structure of society has a major independent impact on an individual's use of drugs. The next sections examine these theories.

Social Influence Theories

The theories presented in this section are (1) social learning, (2) role of significant others in socialization, (3) labeling, and (4) subculture theories. These theories share a common theme: An individual's motivation to seek drugs is caused by social influences or social pressures.

Social Learning Theory

Social learning theory explains drug use as learned behavior. Conventional learning occurs through imitation, trial and error, improvisation, rewarded behavior, and cognitive mental associations and processes (Liska and Messner 1999). Social learning theory focuses directly on how drug use and abuse are learned through interaction with other drug users.

KEY TERMS

social influence theories

social psychological theories that view a person's day-to-day social relations as a primary cause for drug use

structural influence theories

theories that view the structural organization of a society, peer group, or subculture as directly responsible for drug use

This theory emphasizes the pervasive influence of *primary groups*—that is, groups that share a high amount of intimacy and spontaneity and whose members are emotionally bonded. Families and long-term friends are examples of primary groups. In contrast, *secondary groups* share segmented relationships in which interaction is based on prescribed role patterns. An example of a secondary group is the relationship between you and a salesclerk in a grocery store or relationships between employees scattered throughout a corporation. Social learning theory addresses a type of interaction that is highly specific. This type of interaction involves learning specific motives, techniques, and appropriate meanings that are commonly attached to a particular type of drug.

The following are examples of first-time users learning drug-using techniques from their social circles:

The first time I tried smoking weed, nothing much happened. I always thought it was like smoking a cigarette. When the joint came around the first time, I refused it. The next time it came around, I noticed everyone was looking at me. So, I took the joint and started to inhale, then exhale. My friend sitting next to me said something to the effect, "Dude, hold it in; don't waste it. This is good weed and we don't have that much between us." Right after that, we did some "shotguns." This is where someone exhales directly into your mouth — lips to lips. My friend filled my lungs with his exhaled weed breath. After the first comment about holding it in, I started to watch how everyone was inhaling and realized that you really don't smoke weed like an ordinary cigarette; you have to hold in the smoke. (*From Venturelli's research files, male, age 16, second-year high school student in a small Midwestern town, February 15, 1997.*)

I first started using drugs, mostly alcohol and pot, because my best friend in high school was using drugs. My best friend Tim [a pseudonym] learned from his older sister. Before I actually tried pot, Tim kept telling me how great it was to be high on dope; he said it was much better than beer. I was really nervous the first time I tried pot with Tim and another

friend, even though I heard so much detail about it from Tim. The first time I tried it, it was a complete letdown. The second time (the next day, I think it was), I remember I was talking about a teacher we had and in the middle of the conversation, I remember how everything appeared different. I started feeling happy and while listening to Tim as he poked jokes about the teacher, I started to hear the background music more clearly than ever before. By the time the music ended and a new CD started, I knew I was high. (From *Venturelli's research files, 22-year-old male student at a private liberal arts college in the Midwest, February 15, 1997.*)

First time I tried acid [LSD], I didn't know what to expect. Schwa [a pseudonym] told me it was a very different high from grass [marijuana]. After munching on one "square" [one dose of LSD] — after about 20 minutes — I looked at Schwa and he started laughing and said, "Feelin' the effects, Ki-ki?" I said, "Is this it? Is this what it feels like? I feel weird." With a devious grin . . . Schwa said, "Yep. We are now on the runway, ready to take off. Just wait a little while longer, it's going to get better and better. Fasten your seat belts!" (From *Venturelli's research files, male, age 33, May 6, 1996.*)

Learning to perceive the effects of the drug is the second major outcome in the process of becoming a regular user. Here, the ability to feel the authentic effects of the drug is being learned. The more experienced drug users in the group impart their knowledge to naive first-time users. The coaching information they provide describes how to recognize the euphoric effects of the drug.

I just sat there waiting for something to happen, but I really didn't know what to expect. After the fifth "hit," I was just about ready to give up ever getting high. Then suddenly, my best buddy looked deeply into my eyes and said, "Aren't you high yet?" Instead of just answering the question, I immediately repeated the same words the exact way he asked me. In a flash, we both simultaneously burst out laughing. This uncontrollable laughter went on for what appeared to be over 5 minutes. Then he said, "You silly ass, it's not like an alcohol high, it's

a 'high high.' Don't you feel it? It's a totally different kind of high." At that very moment, I knew I was definitely high on the stuff. If this friend would not have said this to me, I probably would have continued thinking that getting high on the hash was impossible for me. (From *Venturelli's research files, 17-year-old male attending a small, private liberal arts college in the Southeast, May 15, 1984.*)

Once drug use has begun, continuing the behavior involves learning the following sequence: (1) identifying where and from whom the drug can be purchased, (2) maintaining steady contact with drug dealers, (3) developing a preoccupation with maintaining the secrecy of use from authority figures and casual non-drug-using acquaintances, (4) reassuring yourself that the drug use is pleasurable, (5) using with more frequency, and (6) replacing non-drug-using friends with drug-using friends.



This child is role-playing largely by imitating the habits of a significant other.

Role of Significant Others

After a pattern of drug use has been established, the learning process plays a role in sustaining drug-taking behavior. Edwin Sutherland (1947; Liska and Messner 1999), a pioneering criminologist in sociology, believed that the mastery of criminal behavior depended on the frequency, duration, priority, and intensity of contact with others who are involved in similar behavior (Heitzeg 1996). This theory can also be applied to drug-taking behavior.

In applying Sutherland's principles of social learning to drug use, which he called differential association theory, the focus is on how other members of social groups reward criminal behavior and under what conditions this deviance is perceived as important and pleasurable.

Becker's and Sutherland's theories explain why adolescents may use psychoactive drugs. Essentially, both theories say that the use of drugs is learned during intimate interaction with others who serve as a primary group. (See "Here and Now," Symptoms of Drug and Alcohol Abuse, for information on how the role of significant others can determine a child's disposition toward or away from illicit drug use.)

Learning theory also explains how adults and the elderly are taught the motivation for using a particular type of drug. This learning occurs through influences such as drug advertising, with its emphasis on testimonials by avid users, by medical experts, and by actors and actresses portraying physicians or nurses. Listeners, viewers, and readers who experience such commercials promoting a particular brand name of over-the-counter drugs are bombarded with the necessary motives, preferred techniques, and appropriate attitudes for consuming drugs. When drug advertisements and medical experts recommend a particular drug for specific ailments, in effect they are authoritatively persuading viewers, listeners, or readers that taking a drug will soothe or cure the medical problem presented.

Are Drug Users More Likely to Be Devious?

Social scientists — primarily sociologists and social psychologists — believe that many social development patterns are closely linked to drug use. Based on the age when an adolescent starts to consume alcohol and other drugs, predictions can be

made about his or her sexual behavior, academic performance, and other behaviors, such as lying, cheating, fighting, and using marijuana. Similar predictions can be made when the adolescent begins using marijuana. A more detailed study (SAMHSA 2000) shows that there is a strong relationship between adolescent behavior problems and alcohol use.

Figure 2.1 shows that past-month adolescent heavy drinking and emotional/behavioral problems often arise concurrently. Adolescents who drink heavily between the ages of 12 to 17 are more likely to report behavior problems, such as aggressiveness and delinquent and criminal behaviors (SAMHSA 2000).

Figure 2.2 shows that children who began drinking or experimenting with alcohol at or before the 7th grade were more likely at 23 years of age to report smoking (data not shown), marijuana use, and involvement with criminal activities, such as arrest and committing a felony. According to the authors of this longitudinal study, which was conducted in California and Oregon, "Early drinkers do not necessarily mature out of a problematic lifestyle as young adults. Interventions for these high-risk youth should start early and address their other public health problems, particularly their tendency to smoke and use other illicit drugs" (Ellickson et al. 2003, p. 949; CESAR 2003).

Other studies show that early intense use of alcohol or marijuana represents a move toward less conventional behavior, greater susceptibility to peer influence, increased delinquency, and lower achievement in school. In general, drug abusers have 14 characteristics in common:

1. Their drug use usually follows clear-cut developmental steps and sequences. Use of legal drugs, such as alcohol and cigarettes, almost always precedes use of illegal drugs.
2. Use of certain drugs, particularly habitual use of marijuana, is linked to **amotivational syndrome**, which some researchers believe is a

KEY TERMS

amotivational syndrome

the assertion by some drug researchers that heavy use of marijuana causes a lack of motivation in achieving goal-directed behavior

Here and Now

Symptoms of Drug and Alcohol Abuse

Following are profiles of children who are less likely and more likely, respectively, to use and abuse drugs.

Less Likely to Use Drugs

- Child comes from a strong family.
- Family has a clearly stated policy toward drug use.
- Child has strong religious convictions.
- Child is an independent thinker, not easily swayed by peer pressure.
- Parents know the child's friends and the friends' parents.
- Child often invites friends into the house and their behavior is open, not secretive.
- Child is busy and productive and pursues many interests.
- Child has a good, secure feeling of self.
- Parents are comfortable with their own use of alcohol, drugs, and pills; set a good example in using these substances; and are comfortable in discussing their use.
- Parents set a good example in handling crisis situations.
- Child maintains at least average grades and good working relationships with teachers.

Symptoms Exhibited by the Child Who May Be Using Drugs

EDITOR'S NOTE: A child will usually display more than one of the symptoms below when experimenting with drugs. Please remember that any number of the symptoms could also be the result of a physical impairment or disorder.

More Likely to Use Drugs

- Abrupt change in behavior (for example, from very active to passive, loss of interest in previously pursued activities such as sports or hobbies).

- Diminished drive and ambition.
- Moodiness.
- Shortened attention span.
- Impaired communication such as slurred speech or jumbled thinking.
- Significant change in quality of school work.
- Deteriorating judgment and loss of short-term memory.
- Distinct lessening of family closeness and warmth.
- Suddenly popular with new friends who are older and unknown to family members.
- Isolation from family members (hiding in bedroom or locking bedroom door).
- Sneaking out of the house.
- Sudden carelessness regarding appearance.
- Inappropriate overreaction to even mild criticism.
- Secretiveness about whereabouts and personal possessions.
- Friends who avoid introduction or appearance in the child's home.
- Use of words that are odd and unfamiliar.
- Secretiveness or desperation for money.
- Rapid weight loss or appetite loss.
- "Drifting off" beyond normal daydreaming.
- Extreme behavioral changes such as hallucination, violence, unconsciousness, and so on that could indicate a dangerous situation close at hand and needing fast medical attention.
- Unprescribed or unidentifiable pills.
- Strange "contraptions" (for example, smoking paraphernalia) or hidden articles.
- Articles missing from the house. Child could be stealing to receive money to pay for drugs.

Source: L.A.W. Publications, *Let's All Work to Fight Drug Abuse* (Addison, TX: C & L Printing Company, 1985), 38. Used with permission of the publisher. Santa Barbara Alcohol and Drug Program, 1996.

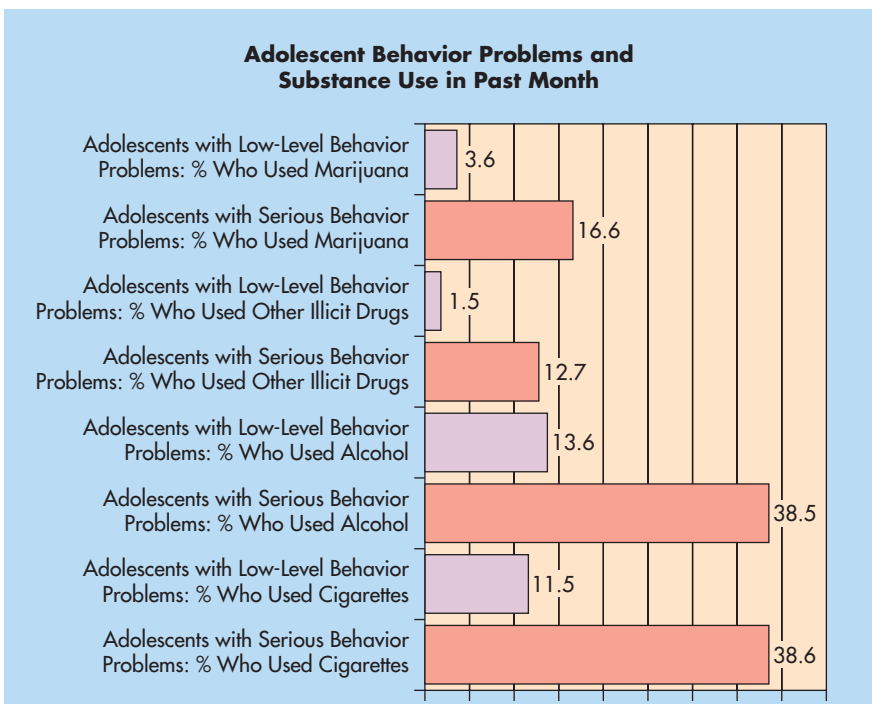


FIGURE 2.1

Adolescent behavior problems and substance use in past month.

Source: SAMHSA. "Study Shows Strong Relationship Between Adolescent Behavior Problems and Alcohol Use." (1 March 2000). Available www.samhsa.gov/news/docshowone.cfm?newsid=175.

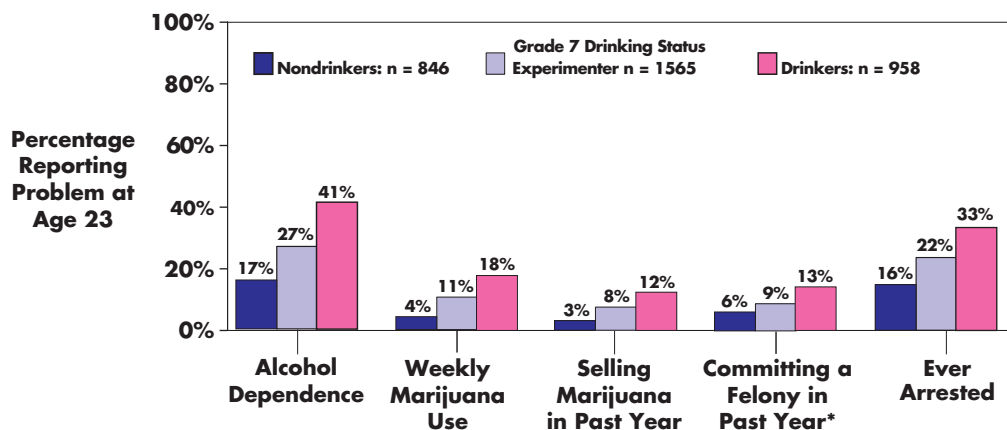


FIGURE 2.2

Percentage of grade 7 nondrinkers, experimenters, and drinkers exhibiting problem behaviors at age 23

*Felonies were defined as buying/selling/holding stolen goods, taking a joy ride without the vehicle owner's permission, breaking into property, arson or attempted arson.

Note: Nondrinkers never had a drink, not even a few sips. Experimenters drank less than three times in the past year, and not in the past month. Drinkers drank three or more times in the past year or drank in the past month. Subjects were assessed in grade 7, again at grade 12, and again at age 23.

Source: Adapted by CESAR (Center for Substance Abuse Research) from P. L. Ellickson, J.S. Tucker, D.J. Klein, "Ten-Year Prospective Study of Public Health Problems Associated with Early Drinking," *Pediatrics* 111(5):949-955, 2003.

general change in personality.¹ This change is characterized by apathy, lack of interest, and inability or difficulty accomplishing goals. The latest research also clearly shows that marijuana use is often responsible for attention and short-term memory impairment and confusion (NIDA 1996).

3. Immaturity, maladjustment, or insecurity usually precede the use of marijuana and other illicit drugs.
4. Those more likely to try illicit drugs, especially before age 12, usually have a history of poor school performance and classroom disobedience.
5. Delinquent or repetitive deviant activities usually precede involvement with illicit drugs.
6. A set of values and attitudes that facilitates the development of deviant behavior exists before the person tries illicit drugs.
7. A social setting in which drug use is common, such as communities and neighborhoods in which peers use drugs indiscriminately, is likely to reinforce and increase the predisposition to drug use.
8. Drug-induced behaviors and drug-related attitudes of peers are usually among the strongest predictors of subsequent drug involvement.
9. Children who feel their parents are distant from their emotional needs are more likely to become drug addicted (see “Here and Now,” Does Divorce Affect Adolescent Drug Use?).
10. The younger people are when they begin using drugs, the higher the probability of continued and accelerated drug use. Likewise, the older people are when they start using drugs, the lower the probability of accelerated use and addiction. The period of greatest risk of initiation and habitual use of illicit drugs is usually over by the early twenties.
11. The family structure has changed, with substantially more than half of all women in the

United States now working outside the home. A higher divorce rate has led to many children being raised in single-parent households. How the lack of a stay-at-home parent or how membership in a single-family household affects the quality of child care and nurturing is difficult to assess.

12. Mobility obstructs a sense of permanency, and it contributes to a lack of self-esteem. Often, when children are repeatedly moved from one location to another, their community becomes nothing more than a group of strangers. They may have little pride in their home or community and have no commitment to society.
13. Among minority members, a major factor involved in drug dependence is a feeling of powerlessness due to discrimination based on race, social standing, or other attributes. Groups subject to discrimination have a disproportionately high rate of unemployment and below-average incomes. In the United States, approximately 14 million children are reared in poverty (Henslin 2003). The adults they have as role models may be unemployed and experience feelings of powerlessness. Higher rates of delinquency and drug addiction occur in such settings.
14. Abusers who become highly involved in selling drugs begin by witnessing that drug trafficking is a lucrative business, especially in rundown neighborhoods. In some communities, selling drugs seems to be the only available route to real economic success (Jones 1996; Shelden, Tracy, and Brown 2001).

Labeling Theory

Although controversy continues over whether labeling is a theory or a perspective (Akers 1968, 1992; Heitzeg 1996; Plummer 1979), this text takes the position that labeling is a theory (Cheron 2001; Hewitt 1994; Liska and Messner 1999), because it explains something very important with respect to drug use. Although labeling theory does not fully explain why initial drug use occurs, it does detail the processes by which many people come to view themselves as socially deviant from others. Note that the terms *deviant* (in cases of individuals) and *deviance* (in cases of behavior) are sociologically

¹ Some argue that perhaps a general lack of ambition (*lethargic behavior*) may precede rather than result from marijuana use or that amotivational syndrome is present in some heavy marijuana users even before the initial use of this drug, and when the drug is used, the syndrome becomes more pronounced. In any case, some researchers believe that the steady use of marijuana and amotivational syndrome occur together.

Here and Now

Does Divorce Affect Adolescent Drug Use?

As an example of how drug users may be affected by socialization, a study conducted by Needle (Needle et al. 1990; NIDA 1990; Siegel and Senna 1994) found higher drug use among adolescents whose parents divorce. According to the study, children who are adolescents when their parents divorce exhibit more extensive drug use and experience more drug-related health, legal, and other problems than their peers. This study linked the extent of teens' drug use to their age at the time of their parents' divorce. Teenagers whose parents divorce were found to use more drugs and experience more drug-related problems than two other groups of adolescents: those who were aged 10 or younger when their parents divorced, and those whose parents remained married.

This study has important implications for drug abuse prevention efforts. Basically, it says that not everyone is at the same risk for drug use. People at greater risk can be identified, and programs should be developed to meet their special needs.

In this research project, drug use among all adolescents increased over time. However, drug use was higher among adolescents whose parents had divorced when their children were either preteens or teenagers.

Drug use was highest for those teens whose parents divorced during their children's adolescent years. Such families also reported more physical problems, family disputes, and arrests.

The research results showed that distinct gender differences existed in the way that divorce affected adolescent drug use, whether the divorce occurred during the offspring's childhood or adolescent years. Males whose parents divorced reported more drug use and drug-related problems than females. Females whose caretaking parents remarried experienced increased drug use after the remarriage. By contrast, males whose caretaking parents remarried reported a decrease in drug-related problems following the remarriage.

The researchers caution that these findings may have limited applicability, as most of the families studied were white and had middle to high income levels. Needle also notes that the results should not be interpreted as an argument in favor of the nuclear family. Overall, divorce affects adolescents in complex ways and remarriage can influence drug-using behavior, particularly when disruptions occur during adolescence; such turmoil can "trigger" a desire for extensive recreational licit and illicit drug use, often leading to drug abuse.

defined as involving the violation of significant social norms held by conventional society. The terms are not used in a judgmental manner, nor are the individuals judged to be immoral or "sick"; instead, the terms refer to an absence of the patterns of behavior expected by conventional society.

Labeling theory says that other people whose opinions we value have a determining influence over our self-image (Best and Luckenbill 1994; Goode 1997; Liska and Messner 1999). (For an example of how labeling theory applies to real-life situations, see "Case in Point.")

KEY TERMS

labeling theory

the theory emphasizing that other people's perceptions directly influence one's self-image

Implied in this theory is the idea that we exert only a small amount of control over the image we portray. In contrast, members of society, especially those we consider to be significant others, have much greater influence and power in defining or redefining our self-image. The image we have of ourselves is vested in the people we admire and look to for guidance and advice. If these people come to define our actions as deviant, then their definition becomes incorporated as a "fact" of our reality.

We can summarize labeling theory by saying that the labels we use to describe people have a profound influence on their self-perceptions. For example, imagine a fictitious individual named Billy. Initially, Billy does not see himself as a compulsive drug user but as an occasional recreational drug user. Let us also assume that Billy is very humor-

▶ Case in Point

This excerpt, from the author's files, illustrates labeling theory.

After my mom found out, she never brought it up again. I thought the incident was over — dead, gone, and buried. Well, . . . it wasn't over at all. My mom and dad must have agreed that I couldn't be trusted anymore. I'm sure she was regularly going through my stuff in my room to see if I was still smoking dope. Even my grandparents acted strangely whenever the news on television would report about the latest drug bust in Chicago. Several times that I can't ever forget were when we were together and I could hear the news broadcast on TV from my room about some drug bust. There they all were whispering about me. My grandma asking if I "quitta the dope." One night, I overheard my mother reassure my dad and grandmother that I

no longer was using dope. You can't believe how embarrassed I was that my own family was still thinking that I was a dope fiend. They thought I was addicted to pot like a junkie is addicted to heroin! I can tell you that I would never lay such a guilt trip on my kids if I ever have kids. I remember that for 2 years after the time I was honest enough to tell my mom that I had tried pot, they would always whisper about me, give me the third degree whenever I returned late from a date, and go through my room looking for dope. They acted as if I was hooked on drugs. I remember that for a while back then I would always think that if they think of me as a drug addict, I might as well get high whenever my friends "toke up." They should have taken me at my word instead of sneaking around my personal belongings. I should have left syringes laying around my room!

Source: Interview with a 20-year-old male college student at a private university in the Midwest, conducted by Peter Venturelli on November 19, 1993.

ous, unpretentious, and very outspoken about his drug use and likes to exaggerate the amount of marijuana he smokes on a daily basis. Slowly, Billy's friends begin to perceive him as a "real stoner." According to labeling theory, what happens to Billy? Because of being noticed when "high," his self-presentation, and the comments he makes about the pleasures of drug use, his friends may begin to reinforce the exaggerated drug use image. At first, Billy may enjoy the reflected image of a "big-time" drug user, but after nearly all of his peers maintain a constant exaggerated image, his projected image may turn negative, especially when his friends show disrespect for his opinions. In this example, labeling theory predicts that Billy's perception of himself will begin to mirror the consistent perception expressed by his accusers. If he is unsuccessful in eradicating the addict image or, in this example, the "stoner" image, Billy will reluctantly concur with the label that has been thrust on him. Or, to strive for a self-image as an occasional marijuana user, Billy may abandon his peers so that he can become acceptable once more in the eyes of other people.

An important originator of labeling theory is Edwin Lemert (Lemert 1951; Liska and Messner 1999; Williams and McShane 1999), who distinguished between two types of deviance: primary and secondary deviance. **Primary deviance** is inconsequential deviance, which occurs without having a lasting impression on the perpetrator. Generally, most first-time violations of law, for example, are primary deviations. Whether the suspected or accused individual has committed the deviant act does not matter. What matters is whether the individual identifies with the deviant behavior.

Secondary deviance develops when the individual begins to identify and perceive himself or herself as deviant. The moment this transition occurs,

KEY TERMS

primary deviance

any type of initial deviant behavior in which the perpetrator does not identify with the deviance

secondary deviance

any type of deviant behavior in which the perpetrator identifies with the deviance

deviance shifts from being primary to secondary. Many adolescents casually experiment with drugs. If, however, they begin to perceive themselves as drug users, then this behavior is virtually impossible to eradicate. The same holds true with OTC drug abuse. The moment an individual believes that he or she feels better after using a particular drug, the greater the likelihood that he or she will consistently use the drug.

Howard Becker (1963) believed that certain negative status positions (such as alcoholic, mental patient, ex-felon, criminal, drug addict, and so on) are so powerful that they dominate others (Pontell 1996; Williams and McShane 1999). In the earlier example, if people who are important to Billy call him a “druggie,” this name becomes a powerful label that takes precedence over any other status positions Billy may occupy. This label becomes Billy’s **master status** — that he is a mindless “stoner.” Even if Billy is also an above-average biology major, an excellent musician, and a dependable and caring person, such factors become secondary because his primary status has been recast as a “druggie.” Furthermore, once a powerful label is attached, it becomes much easier for the individual to uphold the image dictated by members of society and simply to act out the role expected by significant others. Master status labels distort an individual’s public image because other people expect consistency in role performance.

Once a negative master status has been attached to an individual’s public image, labeling theorist Edwin Schur asserted that retrospective interpretation occurs. **Retrospective interpretation** is a form of “reconstitution of individual character or identity” (Schur 1971, p. 52). It largely involves *redefining* a person’s image within a particular social stereotype, category, or group (see cartoon as an illustration). In the eyes of his peers, Billy is now an emotional, intelligent, yet weird or “freaky” stoner.

Finally, William I. Thomas’s (1923) contribution to labeling theory can be summarized in the following theorem: “If men define situations as real, they are real in their consequences” (p. 19). Thus, according to this dictum, when someone is perceived as a drug user, the perception functions as the reality of that person’s character and in turn shapes his or her self-perception.



This cartoon illustrates the reflective process in retrospective interpretation that often occurs in daily conversations when we think that our unspoken thoughts are undetectable and hidden. In reality, however, these innermost thoughts are clearly conveyed through body language and nonverbal gestures.

Source: Reproduced with permission of Alex Silvestri.

Subculture Theory

Subculture theory speaks to the role of peer pressure and the behavior resulting from peer group influences. In all groups, there are certain members who are more popular and respected and, as a result, exert more social influence than other peer members. Often, these more socially endowed members are group leaders, task leaders, or emotional leaders who possess greater ability to influence others. Drug use that results from peer pressure demonstrates the extent to which these

KEY TERMS

master status

major status position in the eyes of others that clearly identifies an individual — for example, doctor, professor, alcoholic, heroin addict

retrospective interpretation

social psychological process of redefining a person in light of a major status position — for example, homosexual, physician, professor, alcoholic, convicted felon, or mental patient

subculture theory

theory that explains drug use as a peer-generated activity

more popular and respected leaders can influence and pressure others to initially use or abuse drugs. These three excerpts from interviews illustrate subculture theory:

When I was 9 or 10, three of my best friends would all take turns sneaking alcohol out of our parents' houses. Then in one of our garages, we would drink the liquor and smoke cigarettes. It was like a street corner thing but it was in a garage. In high school, we would look for the "party-people" and hang out with them. Usually on a Friday or some other school day, we would cut classes and drink and get high at someone's house that would be available. We were a tight-ass group — the goal would be to find a party somewhere. In high school we just hung out together and were known on campus as "the party animals." (From Venturelli's research files, 21-year-old male college student in a small town in the Midwest, November 23, 2000.)

I first started messing around with alcohol in high school. In order to be part of the crowd, we would sneak out during lunchtime at school and get "high." About 6 months after we started drinking, we moved on to other drugs. . . . Everyone in high school belongs to a clique, and my clique was heavy into drugs. We had a lot of fun being "high" throughout the day. We would party constantly. Basically, in college, it's the same thing. (From Venturelli's research files, 19-year-old male student at a small, religiously affiliated private liberal arts college in the Southeast, February 9, 1985.)

The third interview illustrates how friendship, coupled with subtle and not-so-subtle peer pressure, influences the novice drug enthusiast:

There I was on the couch with three of my friends, and as the joint was being passed around, everyone was staring at me. I felt they were saying, "Are you going to smoke with us or will you be a holdout again?" (From Venturelli's research files, 20-year-old male university student, April 10, 1996.)

In sociology, charismatic leaders are viewed as possessing status and power, defined as distinction in the eyes of others. In drug-using peer groups,

such leaders have power over inexperienced drug users. Members of peer groups are often persuaded to experiment with drugs if the more popular members say, "Come on, try some, it's great" or "Trust me, you'll really get off on this, come on, just try it." In groups where drugs are consumed, the extent of peer influence coupled with the art of persuasion and camaraderie are powerfully persuasive and cause the spread of drug use.

A further extension of subculture theory is the *social and cultural support perspective*. This perspective explains drug use and abuse in peer groups as resulting from an attempt by peers to solve problems collectively. In the neoclassic book *Delinquent Boys: The Culture of the Gang* (1955), Cohen pioneered a study that showed for the first time that delinquent behavior is a collective attempt to gain social status and prestige within the peer group (Liska and Messner 1999; Siegel and Senna 1994; Williams and McShane 1999). Members of certain peer groups are unable to achieve respect within the larger society. Such status-conscious youths find that being able to commit delinquent acts and yet evade law enforcement officials is admirable in the eyes of their delinquent peers. In effect, Cohen believed, delinquent behavior is a subcultural solution for overcoming feelings of status frustration and low self-esteem largely determined by lower class status.

Although the emphasis of Cohen's perspective is on explaining juvenile delinquency, his notion that delinquent behavior is a subcultural solution can easily be applied to drug use and abuse primarily in members of lower-class peer groups. Underlying drug use and abuse in delinquent gangs, for example, results from sharing common feelings of alienation and escape from a society that appears noncaring, noninclusive, distant, and hostile.

Consider the current upsurge in violent gang memberships (see Chapter 16 for more details on adolescents and gangs). In such groups, not only is drug dealing a profitable venture, but drug use also serves as a collective response to alienation and estrangement from conventional middle-class society. In cases of violent minority gang members, the alienation results from racism, poverty, effects of migration and acculturation, and effects of minority status in a white, male-dominated soci-

ety such as the United States (Glick and Moore 1990; Moore 1978, 1993; Sanders 1994; Thornberry 2001).

Structural Influence Theories

Structural influence theories focus on how elements in the *organization* of a society, group, or subculture affect the motivation and resulting drug use behavior that is for nonmedical — most often recreational — drug use. The belief is that no single factor in the society, the group, or the subculture produces the attraction to drug use, but rather that the organization itself or the lack of organization largely causes this behavior to occur.

Social disorganization and social strain theories (Liska and Messner 1999; Werner and Henry 1995) identify the different kinds of social change that are disruptive and explain how, in a general sense, people are adversely affected by the change. Social disorganization theory asks, What in the structure and organization of the social order (the larger social structure) causes people to deviate? Social strain theory attempts to answer the question, What in the structure and organization of the family, the peer, and employee social structure causes someone to deviate? This theory suggests that frustration results from being unable to secure the means to achieve sought-after goals, such as the goal of securing good income without much education, a well-paying job without prior training, and so on. Such perceived shortcomings compel an individual to deviate to achieve desired goals.



An example of feeling stressed and experiencing strain from an overly demanding society.

Overall, social disorganization theory describes a situation in which, because of rapid social change, previously affiliated individuals no longer find themselves integrated into a community's social, commercial, religious, and economic institutions. When this type of alienation occurs, community members whose parents were perhaps more affiliated find themselves more disconnected and feel a lack of effective attachment to the social order. As a result, these disconnected or "disaffiliated" people find deviant behavior to be an attractive alternative.

Developing trusting relationships, stability, and continuity are essential for proper socialization. As is discussed later in this chapter, when major identity development and transformation occur in the teen years, some stability in the immediate environment is very important. Yet, especially today, in our postindustrial and technological society, as well as in most other Westernized types of societies, there are more destabilizing and disorienting factors affecting us as a result of rapid technological development and social change (Gergen 2000; Ritzer 1999, 2000).

Although on the surface most people appear to have little or no difficulty adapting to rapid technological social change, many people find themselves forced to maintain a frantic pace merely to "keep up" on a daily basis. The drive to keep up with social and technological innovation is more demanding today than ever before (Gergen 2000). The constant need to keep pace with change and the increasing multiplicity of realities, and ever more contradictory realities, produced by such change often appears barely controllable and somewhat chaotic. Some individuals who are unable to cope with the constant demand for change and the required adjustment to all this change have difficulty securing a stable self-identity. For example, consider the large numbers of people who need psychological counseling and therapy because they find themselves unable to cope with personal, family, and work-related problems and conflicts. In a recent study, a prediction was made that "32% of all American adults will experience some form of mental disorder during their lives" (Cohen 1997, p. 47). The following interview shows how such confusion and lack of control can easily lead to drug use.

Interviewee: The world is all messed up.

Interviewer: Why? In what way?

Interviewee: Nobody gives a damn anymore about anyone else.

Interviewer: Why do you think this is so?

Interviewee: It seems like life just seems to go on and on. . . . I know that when I am under the influence, life is more mellow. I feel great! When I am high, I feel relaxed and can take things in better. Before I came to Chalmers College [a pseudonym], I felt home life was one great big mess; now that I am here, this college is also a big pile of crap. I guess this is why I like smoking dope. When I am high, I can forget my problems. My surroundings are friendlier; I am even more pleasant! Do you know what I mean? (*From Venturelli's research files, interview with a 19-year-old male marijuana user attending a small, private, liberal arts college in the Southeast, February 12, 1984.*)

Similarly, an interview illustrates how a work environment can affect drug use:

I had one summer job once where it was so busy and crazy that a group of us workers would go out on breaks just to get high. We worked the night shift and our "high breaks" were between 2:00 and 5:00 in the mornings. (*From Venturelli's research files, first-year female college student, age 20, July 28, 1996.*)

Current Social Change in Most Societies

Does social change per se cause people to use and abuse drugs? In response to this question, social change — defined as any measurable change caused by technological advancement that disrupts cultural values and attitudes about everyday life — does not by itself cause widespread drug use. In most cases, social change materialistically advances a culture by profoundly affecting the manner of how things are accomplished. At the same time, *rapid* social change disrupts day-to-day behavior anchored by tradition, which has a tendency to fragment such conventional social groups as families, neighborhoods, and communities. By **conventional behavior**, we mean behavior that is largely dictated by custom and tradition and that

evaporates or goes into a state of flux because of the speed of social change.

Examples include the number of youth subcultures that proliferated during the 1960s (Yinger 1982) and other more recent lifestyles and subcultures, such as pro-life groups, pro-choice groups, Mothers Against Drunk Driving (MADD), gay rights groups, rappers, punk rockers, metalers, grunge, taggers, skinheads, satanists, new wave, and rave enthusiasts (Wooden 1995). Furthermore, two other subcultures, teenagers and the elderly, both have become increasingly independent and, in some subgroups, alienated from other age groups in society (see Figure 2.3).

Simply stated, today's social institutions no longer embrace, influence, and lead people as they did in the past. Consequently, people are free to explore different means of expression and types of recreation. For many, this liberating experience leads to new and exciting outcomes; for others, this freedom from conventional societal norms and attitudes creates an attraction to drug use and abuse.

The following two excerpts, gathered from interviews, illustrate social disorganization and strain theory:

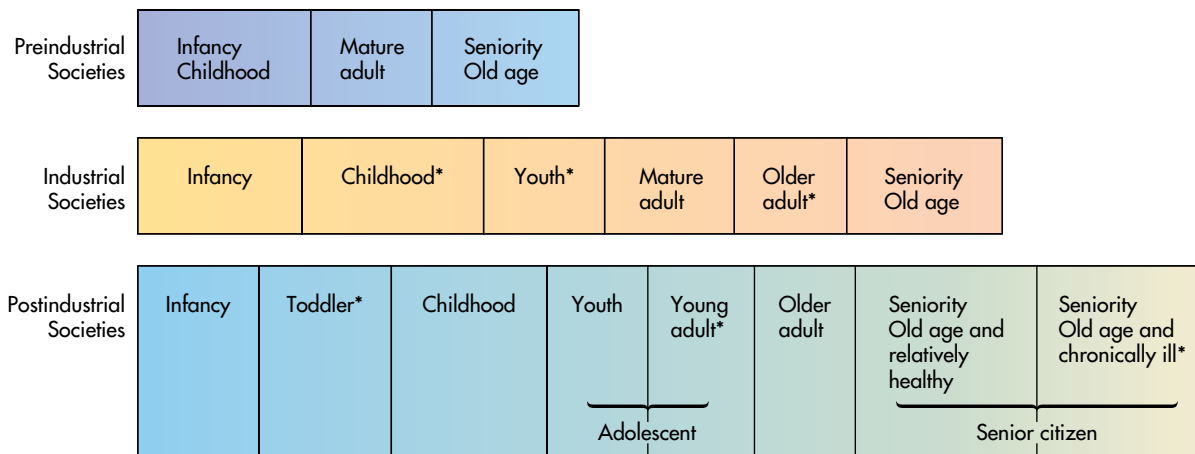
Honest to God, I know things occur much faster than they did 20 years ago. Change is happening faster and occurs more often. What helps is doing some drugs at night at home. I either drink alcohol or do lines of coke. Two different highs but I like them both. This is about the only recreation I have except for the TV at night, after working all darn day nonstop writing letters, answering phone calls, attending meetings, having to go on-site for inspections, and many other things I do each day. (*From Venturelli's research files, interview with a 29-year-old male home security systems manager, Chicago, Illinois, June 23, 2000.*)

I am into my own life because everyone is doing this. I see nearly everyone doing well around here. It's only those who are too stupid

KEY TERMS

conventional behavior

behavior largely dictated by custom and tradition, which is often disrupted by the forces of rapid technological change



*Represents a newly developed and separate stage of identification and expression from the prior era.

FIGURE 2.3

Levels of technological development and resulting subcultures.

to succeed who are poor. I have had a rough time making it lately. Cocaine and speed help, but I know it's not the answer to all my problems. For now, drugs help me to put up with all the shit going on in my life. (From Venturelli's research files, interview with a 25-year-old male residing in the Southeast and receiving various forms of welfare, March 10, 1985.)

There is no direct link between social change and drug use. However, plenty of proof exists that certain dramatic changes occur in the organization of society, and many eventually lead certain groups to use and abuse drugs. Figure 2.3 illustrates how the number of life-cycle stages increases

depending on a society's level of technological development. Overall, it implies that, as societies advance from preindustrial to industrial to our current postindustrial type of society, new subcultures emerge at an increasing rate of development. (See Fischer 1976, for similar thinking.) In contrast to industrial and postindustrial societies, preindustrial societies do not have as many separate and distinct periods and cycles of social development. What is shown in Figure 2.3 and implied here is that the greater the number of distinct life cycles, the greater the fragmentation between the members of different stages of development. Generation gaps (conflicting sets of values and attitudes between age cohorts) cause much ignorance and lack of insight between age-group subcultures. This often leads to separation and fragmentation across age groups who develop distinct lifestyle patterns that can easily conflict.

KEY TERMS

control theory

theory that emphasizes when people are left without bonds to other groups (peers, family, social groups), they generally have a tendency to deviate from upheld values and attitudes

socialization

the growth and development process responsible for learning how to become a responsible, functioning human being

Control Theory

The final major structural influence theory, control theory, emphasizes influences outside the self as the primary cause for deviating to drug use and/or abuse. **Control theory** places importance on positive socialization. **Socialization** is the process by

which individuals learn to internalize the attitudes, values, and behaviors needed to become participating members of conventional society. Generally, control theorists believe that human beings can easily become deviant if left without the social controls provided by groups and organizations. Thus, theorists who specialize in control theory emphasize the necessity of maintaining bonds to family, school, peer groups, and other social, political, and religious organizations (Liska and Messner 1999; Thio 1998).

In the 1950s and 1960s, criminologist Walter C. Reckless (1961; Liska and Messner 1999; Siegel and Senna 1994) developed the containment theory. According to this theory, the socialization process results in the creation of strong or weak internal and external control systems. The degree of self-control, high or low frustration tolerance, positive or negative self-perception, successful or unsuccessful goal achievement, and either resistance or adherence to deviant behavior determine internal control. Environmental pressures, such as social conditions, may limit the accomplishment of goal-striving behavior; such conditions include poverty, minority group status, inferior education, and lack of employment.

The external, or outer, control system consists of effective or ineffective supervision and discipline, consistent or inconsistent moral training, and positive or negative acceptance, identity, and self-worth. Many believe that latchkey children have a higher risk of becoming delinquent due to their sporadic supervision and the uneven levels of attention they receive. Alcoholic parents, as well as parents or guardians who are dependent on other types of drugs, are often at risk for raising children with delinquent tendencies because these parents are more apt to be inconsistent with discipline as a result of their drug addiction(s).

In applying this theory to the use or abuse of drugs, we could say that if an individual has a weak external control system, the internal control system must take over to handle external pressure. Similarly, if an individual's external control system is strong, his or her internal control system will not be seriously challenged. If, however, either the internal or external control system is contradictory (weak internal versus strong external), or in

the worst-case scenario in which both internal and external controls are weak, drug abuse is much more likely to occur.

Table 2.1 shows the likelihood of drug use resulting from either strong or weak internal and external control systems. It indicates that if both internal and external controls are strong, the use and abuse of drugs are much less likely to occur.

Travis Hirschi (1971; Liska and Messner 1999), a much-respected sociologist and social control theorist, believes that delinquent behavior tends to occur when people lack (1) attachment to others, (2) commitment to goals, (3) involvement in conventional activity, and (4) belief in a common value system. If a child or adolescent is unable to become circumscribed within the family setting, school, and nondelinquent peers, then the drift to delinquent behavior is most likely inevitable.

We can apply Hirschi's theories to drug use as follows:

1. Drug users are less likely than nonusers to be closely tied to their parents.
2. Good students are less likely to use drugs.
3. Drug users are less likely to participate in social clubs and organizations and engage in team sport activities.
4. Drug users are very likely to have friends whose activities are congruent with their own attitudes (drug users "hang with" other drug users and delinquents "hang with" other delinquents).

Table 2.1 Likelihood of Drug Use

INDIVIDUAL INTERNAL CONTROL	EXTERNAL SOCIAL CONTROL	
	Strong	Weak or Nonexistent
Strong	Least likely (almost never)	Less likely (probably never)
Weak	More likely (probably will)	Most likely (almost certain)

Source: Reproduced with permission of Peter J. Venturelli.

The following excerpt illustrates how control theory works:

I was 15 when my mother confronted me with drug use. I nearly died. We have always been very close and she really cried when she found my “dug out” [paraphernalia that holds a quantity of marijuana] and a “one hitter” [a tubular device for smoking very small quantities of this drug] in her car. My fear was that she would inquire about my drug use with our next-door neighbors, whose children were my best friends. The neighbor residing on the left of our house was one of my high school teachers who knew me from the day I was born. The neighbor on the right side of our house was our church pastor. For a while after she confronted me, I just sneaked around more whenever I wanted to get high. After a few months, I became so paranoid of how my mother kept looking at me when I would come in at night that I eventually stopped smoking weed. Our family is very close and the town I live in (at that time the population was 400) was filled with gossip. I could not handle the pressure, so I quit. (*From Venturelli's research files, female postal worker, age 22, residing in a small Midwestern town, February 9, 1997.*)

In conclusion, control theory depicts how conformity with supportive groups may prevent deviance. It suggests that control is either internally or externally enforced by family, school, and peer group expectations. In addition, individuals who are not equipped with an internal system of self-control reflecting the values and beliefs of conventional society or who feel personally alienated from major social institutions may deviate without feeling guilty for their actions, often because peer pressure results in a suspension or modification of internal beliefs.

Danger Signals of Drug Abuse

How does one know when the use of drugs moves beyond normal use? Many people are prescribed drugs that affect their moods. Using these drugs wisely can be important for both physical and emotional health. Sometimes, however, it may be difficult to decide when use of drugs to handle

stress or anxiety becomes inappropriate. It is important that your use of drugs does not result in addiction. The following are some danger signals that can help you evaluate your drug use behavior:

1. Do people who are close to you often ask about your drug use? Have they noticed any changes in your moods or behavior?
2. Do you become defensive when a friend or relative mentions your drug or alcohol use?
3. Do you believe you cannot have fun without alcohol or other drugs?
4. Do you frequently get into trouble with the law, school officials, family, friends, or significant others because of your alcohol or other drug use?
5. Are you sometimes embarrassed or frightened by your behavior under the influence of drugs or alcohol?
6. Have you ever switched to a new doctor because your regular physician would not prescribe the drug you wanted?
7. When you are under pressure or feel anxious, do you automatically take a sedative, a drink, or both?
8. Do you turn to drugs after becoming upset, after confrontations or arguments, or to relieve uncomfortable feelings?
9. Do you take drugs more often or for purposes other than those recommended by your doctor?
10. Do you often mix drugs and alcohol?
11. Do you drink or take drugs regularly to help you sleep or even to relax?
12. Do you take a drug to get going in the morning?
13. Do you find it necessary or nearly impossible to not use alcohol and/or other drugs to have sex?
14. Do you find yourself not wanting to be around friends who do not use drugs or drink on a regular basis?
15. Have you ever seriously thought that you may have a drug addiction problem?
16. Do you make promises to yourself or others that you will stop getting drunk or using drugs?
17. Do you drink and/or use drugs alone, often secretly?

A higher number of “yes” answers indicates a greater likelihood that you are abusing alcohol

and/or drugs. Many places offer help at the local level, such as programs in your community listed in the phone book under “Drug Abuse.” Other resources include community crisis centers, telephone hotlines, and the National Mental Health Association.

Low-Risk and High-Risk Drug Choices

As will become readily apparent throughout this text, some very real risks are associated with recreational drug use. Low-risk and high-risk drug choices refer to two major levels of alcohol and other drug use. **Low-risk drug choices** refer to values and attitudes that keep the use of alcohol and other drugs in control. **High-risk drug choices** refer to values and attitudes that lead to using drugs habitually and addictively, resulting in emotional, psychological, and physical health problems. Low-risk choices include abstinence from all drugs or remaining in true control of the quantity and frequency of drugs taken.

Low-risk choices require self-monitoring your consumption of alcohol and other drugs to reduce your risk of an alcohol and other drug-related problem. Both “low-risk” and “high-risk” are appropriate descriptive concepts that allow us to focus on the health and safety issues involved in drug use and refer to developing and maintaining completely different values and attitudes in your approach to alcohol and other drugs.

This chapter described numerous factors influencing drug use and reasons why people start using or abusing drugs. There are also numerous theories that attempt to explain initial and habitual use. Some people can easily become addicted to alcohol and other drugs because of inherited characteristics, personality, mental instability or illness, and vulnerability to present situations. Others who have more resistance to alcohol and drug addiction may have stronger convictions and abilities to cope with different situations.

Maintaining a Low-Risk Approach

To minimize the risk of alcohol and drug-related problems, we suggest you remain aware of the following:

1. Investigate your family drug history. Does anyone in your family have a history of alcohol or drug abuse? How many members of your family who have alcohol or drug problems are blood relatives? In other words, are you more likely to become dependent on alcohol or drugs because of inherited genes or because of the values and attitudes to which you are exposed?
2. Do you particularly enjoy the effects of alcohol and other drugs? Do you spend a lot of time thinking about how “good” it feels to be high?
3. Does it seem as if the only time you really have fun is when you are using alcohol and other drugs?
4. Keep in mind the following, which is covered throughout this text:
 - **Body size.** A small person typically becomes more impaired by drug use than a larger person.
 - **Gender.** Women typically become more impaired than men of the same size, especially with regard to alcohol use.
 - **Other drugs.** Taking a combination of drugs generally increases the risk of impairment and, in some combinations, accidental death.
 - **Fatigue or illness.** Fatigue increases impairment from alcohol and increases the risk for impairment.
 - **Mind-set.** As you set out to drink or use other drugs, are you expecting heavy use of alcohol or heavy involvement with drugs to the point of inebriation or severe distortion of reality as the evening’s outcome? More importantly, what view do you hold regarding moderate use of drugs versus heavy use of drugs?
 - **Empty stomach.** Taking drugs on an empty stomach increases impairment from most drugs.

KEY TERMS

low-risk drug choices

developing values and attitudes that lead to controlling the use of alcohol and drugs

high-risk drug choices

developing values and attitudes that lead to using drugs both habitually and addictively

Also keep in mind that most excessive drug use comes with the following risks:

1. It is against all school policies.
2. It is unlawful behavior (risky with the law).
3. Excessive alcohol and other drug use usually leads not only to public attention, but also to criminal justice attention (police and the courts). Jail time or prison, fines, costly forced rehabilitation programs, and community service work are possible outcomes.
4. The defense costs involved in even simple drug possession charges are often \$3000 to \$8000 (often beyond an individual's ability to pay for such legal services).
5. A criminal record is a public record and can be acquired or suddenly come to the attention of school officials (especially loan officers and/or government loan personnel), credit bureaus, as well as any other community members.

We leave you with the question: *Are excessive drug use and the resulting drug dependence still worth such risks?* This question is critical, especially when we know that the more often drugs are consumed, the greater the potential not only for drug dependence and addiction, but also for damage to health, personal well-being, family and interpersonal relationships, and community respect.

Discussion Questions

1. Define the terms *addiction*, *tolerance*, *dependence*, and *withdrawal*.
2. Describe and contrast the disease and characterological (personality predisposition) models of addiction.
3. List several biological, social, and cultural factors that may be responsible for addiction to drugs.
4. In addition to better cultivation techniques, cite several other possible reasons why the potency of the average marijuana joint has increased since 1960.
5. Given that more than 88% of the U.S. population members are daily drug users of some form, do you think we need to reexamine our strict drug laws, which may be punishing a sizable number of drug users in our society who simply want to use illicit drugs?
6. Is there any way to combine the biological and sociological explanations for why people use drugs so that the two perspectives do not conflict? (Sketch out a synthesis between these two sets of theoretical explanations.)
7. What is the relationship between mental illness and drug abuse? Why is this relationship important?
8. Do you accept the “rats in a maze” concept that psychology offers for explaining why people come to abuse drugs? (This view primarily states that people are like automatons or robots and that reinforcement explains why certain people become addicted to drugs.) Explain your answer.
9. In reviewing the psychological and sociological theories, which best explain drug use? Defend your answer.
10. Does differential association theory take into account non-drug-using individuals whose socialization environment was drug-infested?
11. Do you believe drug users are socialized differently and that these alleged differences account for drug use? Defend your answer.
12. Can divorce be blamed for adolescent drug use? Why or why not? If so, to what extent?
13. Do the current and alarming drug abuse statistics reflect the failure of social change in our society? Why do you agree or disagree with this statement?
14. Is making low-risk choices regarding drug use a more realistic approach for drug moderation than advocating “Just say no” to drug use? Why or why not?

Key Terms

- moral model** 58
- disease model** 58
- characterological or personality predisposition model** 58
- personality disorders** 58
- psychoanalysis** 58
- “double wall” of encapsulation** 58
- genetic and biophysiological theories** 62
- central nervous system** 62
- psychoactive effects** 62
- neurotransmitters** 62
- dopamine** 62
- social learning theory** 66
- habituation** 66
- “addiction to pleasure” theory** 66
- sensation-seeking individuals** 66
- differential reinforcement** 67
- social influence theories** 68
- structural influence theories** 68
- amotivational syndrome** 70
- labeling theory** 74
- primary deviance** 75
- secondary deviance** 75
- master status** 76
- retrospective interpretation** 76
- subculture theory** 76
- conventional behavior** 79
- control theory** 80
- socialization** 80
- low-risk drug choices** 83
- high-risk drug choices** 83

Summary

- 1** Chemical dependence has been considered a major social problem throughout U.S. history.
- 2** People define chemical addiction in many ways. The essential feature is a chronic adherence to drugs despite significant negative consequences.
- 3** The major models of addiction are the moral model, the disease model, and the characterological or personality predisposition model.
- 4** Transitional periods, such as adolescence and middle age, are associated with unique sets of risk factors.
- 5** Addiction is a gradual process during which a minority of drug users become caught up in vicious cycles that worsen their situation, cause psychological and biological abnormalities, and increase their drug use. Addiction tends to progress, although this step is not inevitable.
- 6** Drug use is more serious today than in the past because (1) drug use and abuse have increased dramatically since 1960; (2) today’s illicit drugs are more potent than in the past; (3) the media present drug use as rewarding; (4) drug use physically harms members of society; and (5) drug use and dealing by violent gangs are increasing at alarming rates.
- 7** Genetic and biophysiological theories explain addiction in terms of genes, brain dysfunction, and biochemical patterns.
- 8** Drugs of abuse interfere with the functioning of neurotransmitters, chemical messengers used for communication between brain regions. Drugs with abuse potential enhance the pleasure centers by causing the release of a specific brain neurotransmitter such as dopamine, which acts as a positive reinforcer.
- 9** The American Psychiatric Association classifies severe drug dependence as a form of psychiatric disorder. Drug abuse can cause mental conditions that mimic major psychiatric illnesses, such as schizophrenia, severe anxiety disorders, and suicidal depression.

10 Four genetic factors can contribute to drug abuse: (1) Many genetically determined psychiatric disorders are relieved by drugs of abuse, which in turn encourages their use; (2) high rates of addiction result from people who are genetically sensitive to addictive drugs; (3) such character traits as insecurity and vulnerability, which are often genetically determined, can lead to drug abuse behavior; and (4) the inability to break from a particular type of drug addiction may be genetically determined, especially when severe craving or very unpleasant withdrawal effects dominate.

11 Introversion and extroversion patterns have been associated with levels of neural arousal in brain stem circuits. These forms of arousal are closely associated with effects caused by drug stimulants or depressants.

12 Reinforcement or learning theory says that the motivation to use or abuse drugs stems from how the “highs” from alcohol and other drugs reduce anxiety, tension, and stress. Positive social influences by drug-using peers also promote drug use.

13 Social influence theories include social learning, the role of significant others, labeling, and subculture theories. Social learning theory explains drug use as a form of learned behavior. Significant others play a role in the learning process involved in drug use and/or abuse. Labeling theory says that other people we consider important can influence whether drug use becomes an option for us. If key people we admire or fear come to define our actions as deviant, then the definition becomes the “fact” of our reality. Subculture theories trace original drug experimentation, use, and/or abuse to peer pressure.

14 There are a number of consistencies in socialization patterns found among drug abusers, which range from immaturity, maladjustment, and insecurity to exposure and belief that selling drugs is a very lucrative business.

15 Sociologist Howard Becker believes that first-time drug users become attached to drugs because of three factors: (1) They learn the techniques of drug use; (2) they learn to perceive the

pleasurable effects of drugs; and (3) they learn to enjoy the drug experience.

16 Primary deviance is deviant behavior that the perpetrator does not identify with; hence, it is inconsequential deviant behavior. Secondary deviance is deviance that one readily identifies with.

17 Both internal and external social control should prevail concerning drug use. Internal control deals with internal psychic and internalized social attitudes. External control is exemplified by living in a neighborhood and community in which drug use and abuse are severely criticized or not tolerated as a means to seek pleasure or avoid stress and anxiety.

18 Low-risk and high-risk drug use choices refer to the process of developing values and attitudes toward alcohol and other drugs. Low-risk drug choices encompass values and attitudes leading to a controlled use of alcohol and drugs — from total abstinence to very moderate use. High-risk choices encompass values and attitudes leading to using drugs both habitually and addictively.

References

- Akers, R. L. “Problems in the Sociology of Deviance: Social Definition and Behavior.” *Social Forces* 6 (June 1968): 455–465.
- Akers, R. L. *Drugs, Alcohol, and Society: Social Structure, Process, and Policy*. Belmont, CA: Wadsworth, 1992.
- American Psychiatric Association (APA). “Substance-Related Disorders.” *Diagnostic and Statistical Manual of Mental Disorders DSM-IV-TR*, 4th ed. Revised. A. Francis, Chair. Washington, DC: American Psychiatric Association, 2000: 191–295.
- Apostolides, M. “Special Report: The Addiction Revolution: Old Habits Get New Choices.” *Psychology Today* 29 (September/October 1996): 33–43, 75–76.
- Bandura, A. *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall, 1977.
- Beattie, M. *Codependent No More*. San Francisco: Harper, 1987.
- Becker, H. S. *Outsiders: Studies in the Sociology of Deviance*. New York: Free Press, 1963.
- Becker, H. S. “History, Culture, and Subjective Experience: An Exploration of the Social Basis of Drug-Induced Experiences.” *Journal of Health and Social Behavior* 8 (1967): 163–176.
- Bejerot, N. “Current Problems of Drug Addiction.” *Lakar-tidningen* (Sweden) 62, 50 (1965): 4231–4238.

- Bejerot, N. *Addiction: An Artificially Induced Drive*. Springfield, IL: Thomas, 1972.
- Bejerot, N. "The Biological and Social Character of Drug Dependence." In *Psychiatrie der Gegenwart, Forschung und Praxis*, 2nd ed., edited by K. P. Kisker, J. E. Meyer, C. Muller, and E. Stromogrew, Vol. 3: 488P518. Berlin: Springer-Verlag, 1975.
- Bespalov, A., A. Lebedev, G. Panchenko, and E. Zvartau. "Effects of Abused Drugs on Thresholds and Breaking Points of Intracranial Self-Stimulation in Rats." *European Neuropsychopharmacology: The Journal of the European College of Neuropharmacology* 9 (1999): 377–383.
- Best, J., and D. F. Luckenbill. *Organizing Deviance*, 2nd ed. Englewood Cliffs, NJ: Prentice-Hall, 1994.
- Burns, D. B. "The Web of Caring: An Approach to Accountability in Alcohol Policy." In *Designing Alcohol and Other Drug Prevention Programs in Higher Education*. U.S. Department of Education. Newton, MA: Higher Education Center for Alcohol and Other Drug Prevention, 1997. Available <http://www.edc.org/hec/pubs/theorybook/burns.html>.
- Carlson, N. *Psychology: The Science of Behavior*, 3rd ed. Boston: Allyn and Bacon, 1990.
- Center for Substance Abuse Research (CESAR). "Early Alcohol Users More Likely to Report Substance Use and Criminal Activity as Young Adults" (September 2003). Available <http://www.cesar.umd.edu>.
- Centers for Disease Control and Prevention (CDCP). "Youth Risk Behavior Surveillance — United States, 2003." *Morbidity and Mortality Weekly Report* 53, SS-2 (2004): 1–96.
- Cheron, J. M. *Symbolic Interactionism: An Introduction, an Interpretation, an Integration*, 7th ed. Englewood Cliffs, NJ: Prentice-Hall, 2001.
- Clinard M. B., and R. F. Meier. *Sociology of Deviant Behavior*, 8th ed. Fort Worth, TX: Harcourt Brace Jovanovich, 1992.
- Cohen, A. K. *Delinquent Boys: The Culture of the Gang*. Glencoe, IL: Free Press, 1955.
- Cohen, G. D. "No Job for a Grown-Up." *Utne Reader* (January/February 1997): 47.
- Conrad, P., and J. W. Schneider. *Deviance and Medicalization*. St. Louis, MO: Mosby, 1980.
- Doweiko, H. E. *Concepts of Chemical Dependency*, 5th ed. Pacific Grove, CA: Brooks/Cole, 2002.
- Drug Strategies. "Keeping Score: What We Are Getting for Our Federal Drug Control Dollars 1995." Washington, DC: 1995. Available 080/edres/colleges/boss/depts/cesar/drugs/ks1995.
- Ellickson, P. L., J. S. Tucker, and D. J. Klein. "Ten-Year Prospective Study of Public Health Problems Associated with Early Drinking." *Pediatrics* 111, 5 (2003): 949–955.
- Eysenck, H. J., and M. W. Eysenck. *Personality and Individual Differences: A Natural Science Approach*. New York: Plenum Press, 1985.
- Farrar, H., and G. Kearns. "Cocaine: Clinical Pharmacology and Toxicology." *Journal of Pediatrics* 115 (1989): 665–675.
- Fischer, C. S. *The Urban Experience*. New York: Harcourt Brace Jovanovich, 1976.
- Frosch, W. A. "An Analytic Overview of the Addictions." In *The Addictions: Multidisciplinary Perspectives and Treatments*, edited by H. Milman and H. Shaffer. Lexington, MA: Lexington Books/D.C. Heath, 1985.
- Gardner, E. L. "Brain Reward Mechanisms." In *Substance Abuse: A Comprehensive Textbook*, 2nd ed., edited by J. H. Lowinson, P. Ruiz, R. B. Millman, and J. G. Langrod, pp. 60–69. Baltimore: Williams & Wilkins, 1992.
- Gergen, K. *The Saturated Self: Dilemmas of Identity in Contemporary Life*. New York, NY: Basic Books, Inc., 2000.
- Glick, R., and J. Moore, eds. *Drugs in Hispanic Communities*. New Brunswick, NJ: Rutgers University Press, 1990.
- Goode, E. *Deviant Behavior*, 5th ed. Upper Saddle River, NJ: Prentice Hall, 1997.
- Gray, J. A. *The Psychology of Fear and Stress*, 2nd ed. Cambridge, UK: Cambridge University Press, 1987.
- Gray, P. *Psychology*, 3rd ed. New York: Worth, 1999.
- Grinspoon, L. "Update on Cocaine." *Harvard Mental Health Letter* 10 (September 1993): 1–4.
- Heitzeg, N. A. *Deviance: Rulemakers and Rulebreakers*. Minneapolis, MN: West Publishing, 1996.
- Henslin, J. M. *Essentials of Sociology: A Down-to-Earth Approach*, 5th edition. Boston: Pearson/Allyn and Bacon, 2003.
- Hewitt, J. P. *Self and Society: A Symbolic Interactionist Social Psychology*, 6th ed. Boston: Allyn and Bacon, 1994.
- Hirschi, T. *Causes of Delinquency*, 2nd ed. Los Angeles: University of California Press, 1971.
- Inciardi, J. A., D. Lockwood, and A. E. Pottieger. *Women and Crack Cocaine*. New York: Macmillan, 1993.
- Jellinek, E. M. *The Disease Concept of Alcoholism*. Highland Park, NJ: Hillhouse Press, 1960.
- Johnston, L. D., P. M. O'Malley, and J. G. Bachman. University of Michigan News and Information Services; 17 Dec. 1999, *Citing the National Survey on Drug Abuse, The Monitoring the Future Study*. The University of Michigan Institute for Social Research, National Institute on Drug Abuse, U.S. Department of Human Services, National Institutes of Health, 1999.
- Johnston, L. D., P. M. O'Malley, and J.G. Bachman. *Monitoring the Future National Results on Adolescent Drug Use: Overview of Key Findings, 2002*. Rockville, MD: National Institute on Drug Abuse (NIDA), 2003.
- Johnston, L. D., P. M. O'Malley, J. G. Bachman, and J. E. Schulenberg. *Monitoring the Future: National Survey Results on Drug Use, 1975–2003, Vol. 1: Secondary School Students 2003*. Bethesda, MD: National Institute on Drug Abuse, 2003.
- Johnston, L. D., P. M. O'Malley, J. G. Bachman, and J. E. Schulenberg. *Monitoring the Future: National Results*

- on *Adolescent Drug Use: Overview of Key Findings*. Bethesda, MD: National Institute on Drug Abuse, 2004.
- Jones, J. *Hep-Cats, Narcs, and Pipe Dreams: A History of America's Romance with Illegal Drugs*. Baltimore, MD: Johns Hopkins University Press, 1996.
- Kelly, K., and P. Ramundo. *You Mean I'm Not Lazy, Stupid, and Crazy?!* New York: Scribner, 1993.
- Khantzian, E. J. "Addiction: As a Disease" (no date). Available <http://www.counselormagazine.com/pfv.asp/aid=addiction.asp>.
- Koob, G. "Drug Addiction." In *Neurobiology of Disease* 7, 5 (October 2000): 543–545.
- Lemert, E. M. *Social Psychology: A Systematic Approach to the Theory of Sociopathic Behavior*. New York: McGraw-Hill, 1951.
- Liska, A. E., and S. F. Messner. *Perspectives on Crime and Deviance*. Upper Saddle River, NJ: Prentice Hall, 1999.
- Marshall, M. "Conclusions." In *Beliefs, Behavior, and Alcoholic Beverages: A Cross-Cultural Survey*, edited by M. Marshall, 451–457. Ann Arbor, MI: University of Michigan Press, 1979.
- Mathias, R. "Novelty Seekers and Drug Abusers Tap Same Brain Reward System, Animal Studies Show." *NIDA Notes* 10, 4 (July/August 1995): 1–5.
- Moore, J. *Homeboys: Gangs, Drugs and Prison in the Barrios of Los Angeles*. Philadelphia: Temple University Press, 1978.
- Moore, J. "Gangs, Drugs, and Violence." In *Gangs: The Origins and Impact of Contemporary Youth Gangs in the United States*, edited by S. Cummings and D. J. Monti, 27–46. Albany: State University of New York Press, 1993.
- Myers, P. L. "Sources and Configurations of Institutional Denial." *Employee Assistance Quarterly* 5(B) (1990): 43–54.
- National Institute on Drug Abuse (NIDA). *Principles of Drug Addiction Treatment*. New York: The Lindsmith Center, 1996.
- National Institute on Drug Abuse (NIDA). "Study Finds Higher Use Among Adolescents Whose Parents Divorce." *NIDA Notes* 5 (Summer 1990): 10.
- National Institute on Drug Abuse (NIDA). "Double Trouble: Substance Abuse and Psychiatric Disorders." *NIDA Notes* 8 (November/December 1993): 20.
- National Institute on Drug Abuse (NIDA). "Attention and Memory Impaired in Heavy Users of Marijuana." Rockville, MD: Office of the National Institute on Drug Abuse, 20 February 1996. Available <http://www.health.org/pressrel/heavymar/html>.
- National Institute on Drug Abuse (NIDA). *2002 Monitoring the Future, Data Tables*. Table 2 — Trends in Annual and 30-Day Prevalence. Rockville, MD: Office of the National Institute on Drug Abuse, 20 June 2003.
- Needle, R. H., S. S. Su, and W. J. Doherty. "Divorce, Remarriage, and Adolescent Substance Use: A Prospective Longitudinal Study." *Journal of Marriage and the Family* 52 (1990): 157–159.
- O'Brien, R., S. Cohen, G. Evans, and J. Fine. *The Encyclopedia of Drug Abuse*, 2nd ed. New York: Facts on File, 1992.
- Office of National Drug Control Policy (ONDCP). *Drug Facts: Cocaine*. White House Drug Policy. Rockville, MD: November 2003. Available <http://www.whitehousedrugpolicy.gov/publications/factsht/cocaine/>.
- Plummer, K. "Misunderstanding Labelling Perspectives." *Deviant Interpretations*, edited by D. Downes and P. Rock, 85–121. London: Robertson, 1979.
- Pontell, H. N. *Social Deviance*, 2nd ed. Upper Saddle River, NJ: Prentice Hall, 1996.
- Radowitz, J. V. "Smoking and Drug Abuse Traits Linked to Genes." *The Independent's*, 18 June 2003, Independent Digital (UK) Ltd. Available <http://news.independent.co.uk/uk/health/story.jsp?story=416515>.
- Reckless, W. C. "A New Theory of Delinquency." *Federal Probation* 25 (1961): 42–46.
- Ritzer, G. *Enchanting a Disenchanted World: Revolutionizing the Means of Consumption*. Thousand Oaks, CA: Pine Forge Press, 1999.
- Ritzer, G. *The McDonaldization of Society*, 3rd ed. Thousand Oaks, CA: Pine Forge Press, 2000.
- Rousar, E., K. Brooner, M. W. Regier, and G. E. Bigelow. "Psychiatric Distress in Antisocial Drug Abusers: Relation to Other Personality Disorders." *Drug and Alcohol Dependence* 34 (1995): 149–154.
- Rudgley, R. *Essential Substances: A Cultural History of Intoxicants in Society*. New York: Kodansha International, 1993.
- Sanders, W. B. *Gangbans and Drive-bys: Grounded Culture and Juvenile Gang Violence*. New York: Aldine De Gruyter, 1994.
- Schur, E. M. *Labeling Deviant Behavior*. New York: Harper & Row, 1971.
- Shelden, R. G., S. K. Tracy, and W. B. Brown. *Youth Gangs in American Society*, 2nd ed. Belmont, CA: Wadsworth/Thomson Learning, 2001.
- Siegel, L. J., and J. J. Senna. *Juvenile Delinquency: Theory, Practice and Law*. St. Paul, MN: West Publishing, 1994.
- Smith, D., E. Milkman, and S. Sunderwirth. "Addictive Disease: Concept and Controversy." In *Addictions: Multidisciplinary Perspectives and Treatments*, edited by H. Milkman and H. J. Shaffer. Lexington, MA: Lexington Books/D.C. Heath, 1985.
- Spanagel, R., and F. Weiss. "The Dopamine Hypothesis of Reward: Past and Current Status." *Trends in Neuroscience* 22 (1999): 521P27.
- Substance Abuse and Mental Health Services Administration (SAMHSA). *National Household Survey on Drug Abuse: Fact Sheet* (August 1998). Available <http://www.samhsa.gov/PRESS/99/990818fs.htm>.
- Substance Abuse and Mental Health Services (SAMHSA). *Study Shows Strong Relationship Between Adolescent Behavior Problems and Alcohol Use*. Rockville, MD: U.S. Department of Health and Human Services Press Release, 1 March

2000. Available <http://www.health.org/PRESSREL/mar00/1.htm>.
- Sutherland, E. *Principles of Criminology*, 4th ed. Philadelphia: Lippincott, 1947.
- Tarter, R. E., A. Alterman, and K. L. Edwards. "Alcoholic Denial: A Biopsychosociological Interpretation." *Journal of Studies on Alcohol* 45 (1983): 214–218.
- Thio, A. *Deviant Behavior*, 5th ed. New York: Addison Wesley Longman, 1998.
- Thomas, W. I., with D. S. Thomas. *The Child in America*. New York: Knopf, 1923.
- Thornberry, T. P. "Risk Factors for Gang Membership." In *The Modern Gang Reader*, 2nd ed., edited by J. Miller, C. L. Maxson, and M. W. Klein, 32–42. Los Angeles: Roxbury, 2001.
- Uhl, G., K. Blum, E. Noble, and S. Smith. "Substance Abuse Vulnerability and D-2 Receptor Genes." *Trends in Neurological Sciences* 16 (1993): 83–88.
- Uhl, G., A. Persico, and S. Smith. "Current Excitement with D-2 Dopamine Receptor Gene Alleles in Substance Abuse." *Archives of General Psychiatry* 49 (February 1992): 157–160.
- USA Today. "Seven in 10 Drug Users Work Full-Time" (1999). Available <http://www.usatoday.com/life/health/addiction/lhadd021.htm>.
- Volkow, N. *Changes in Human Brain Systems After Longterm Cocaine Use* (1 February 1999). Available <http://165.112.78.61/meetsum/ccb/volkow.html>.
- Waldorf, D. "Natural Recovery from Opiate Addiction: Some Social-Psychological Processes of Untreated Recovery." *Journal of Drug Issues* 13 (1983): 237–280.
- Weiss, F. *Cocaine Dependence and Withdrawal: Neuroadaptive Changes in Brain Reward and Stress Systems* (1999). Available <http://165.112.78.61/meetsum/ccb/weiss.html>.
- Werner, E., and S. Henry. *Criminological Theory: An Analysis of Its Underlying Assumptions*. Fort Worth, TX: Harcourt Brace College Publishers, 1995.
- Williams III, F. P., and M. D. McShane. *Criminological Theory*, 3rd ed. Upper Saddle River, NJ: Prentice Hall, 1999.
- Wilson, W. J. *The Truly Disadvantaged*. Chicago: University of Chicago Press, 1990.
- Wooden, W. S. *Renegade Kids, Suburban Outlaws: From Youth Culture to Delinquency*. Belmont, CA: Wadsworth/Thomson Learning, 1995.
- World Health Organization Expert Committee on Addiction-Producing Drugs. *World Health Organization Technical Report* 273 (1964): 9–10.
- Wyman, J. "Promising Advances Toward Understanding the Genetic Roots of Addiction." *NIDA Notes* 12 (July/August 1997): 1–5.
- Yinger, M. J. *Countercultures: The Promise and the Peril of a World Turned Upside Down*. New York: Free Press, 1982.