

PSYCHOLOGY REVIVALS

Drugs, Daydreaming, and Personality

A Study of College Youth

Bernard Segal, George J. Huba
and Jerome L. Singer



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Originally published in 1980, this book presents a detailed account of a series of investigations that examined the patterns of resort to drugs and alcohol use in college youth, and how such substance uses are linked to personality characteristics and daydreaming patterns. The Editors chose to emphasize the more "private" features of the personality, because these had often been ignored in earlier research, despite popular assumptions that there are close ties between fantasy, inwardness, "spacey" qualities (all suggesting permanent changes in mental organization), and substance use in youth. This volume will be of interest to a wider audience than just drug and alcohol researchers, because of the effort to go beyond normative patterns of substance use toward explorations of personality and consciousness.



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DRUGS, DAYDREAMING, and PERSONALITY: A Study of College Youth

BERNARD SEGAL

University of Alaska, Anchorage

GEORGE J. HUBA

University of California, Los Angeles

JEROME L. SINGER

Yale University



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Preface

This book presents a detailed account of a series of investigations that examined the patterns of resort to drugs and alcohol use in college youth, and how such substance uses are linked to personality characteristics and daydreaming patterns. We have chosen to emphasize the more “private” features of the personality, because these have often been ignored in earlier research, despite popular assumptions that there are close ties between fantasy, inwardness, “spacey” qualities (all suggesting permanent changes in mental organization), and substance use in youth. The plan for this study stemmed originally from the collaboration between two of us, Segal and Singer, who had the opportunity of examining a broad spectrum of college freshmen at such contrasting institutions as Murray State University, in a rural border region of Kentucky, and the more urban, affluent, nationally selected and academically competitive, Ivy League, Yale University. We were subsequently joined by Huba.

Supported by a 2-year grant from the National Institute of Drug Abuse (Grant #RO1-DA-00590), our plan was to study two annual cohorts of college students, males and females, from each institution, and to move beyond large-scale psychometric data analyses to specific processes through experimental procedures as well as intensive interviews. We hoped to not only gather basic data on substance use and abuse but to also examine patterns and reasons for such use and to see how the normal personality and daydreaming styles of college youth might predict differential degrees of resort to drugs or alcohol. Along the way we also wanted to examine basic theoretical questions about the stream of consciousness in young adults, the functional role of daydreaming in daily life, and the different patterns of daydreams and broader self-reported hierarchies of motivation.

X PREFACE

Because of our effort to go beyond normative patterns of substance use toward explorations of personality and consciousness, we believe this volume will be of interest to a wider audience than just drug and alcohol researchers. We have attempted some novel applications of psychometrics and statistics that may be of interest to students of individual differences and to investigators in the area of the psychology of personality. We have not stinted on the technical details that critical scientists require, yet we have tried to recognize wherever possible the broader human interest of our subject matter, such as the initiation of 18-year-olds into the new life of a residential college with its special attractions and temptations. The clinical psychologist, the investigator of the psychology of consciousness, the college counselor and more general workers in the fields of substance use, psychiatrists, social workers, and drug counselors may also find material of interest in this volume.

The research we describe here involved a complex cooperative effort not only between the three authors but also between teams of assistants, some at Murray State University in Murray, Kentucky, some at Yale University in New Haven, and others, as the authors moved on professionally, to the University of California, Los Angeles (Huba) and the University of Alaska, Anchorage (Segal). Our study called for advanced research assistants with administrative skills and public sensitivity, for competent young people to help in group testing, individual interviewing, the conducting of experiments, recording, coding and punching of data, typing protocols and manuscripts, and so on. We have acknowledged these people in special government reports, some specific publications in professional journals derived from this work, and in a few cases in doctoral dissertations that emerged from this program of research. We shall therefore limit our formal thanks only to the major participants in the project at each setting.

At Yale University, Dr. Susan Frank took the major role in soliciting subjects, organizing group testing, running individual experiments and interviews, and keeping track of data. Drs. Anthony Campagna and Philip Powell also helped with some of the experimental studies and group testing. Mr. Irving Leon, an undergraduate at Yale, was very helpful in various phases of the study and in interviewing, as was Ms. Judy Pack. Other research assistants for extensive phases of the work at Yale University included David Diamond, Jon Douglas Singer, and George Rhenberg. Valuable clerical and research assistance was provided by Delores Hyslop and Audrey Klein, and Esta Schaefer aided in manuscript preparation, as did Cheryl Olson and Kay Wardlaw.

The work conducted at Murray State University could not have been done without the very able assistance of Sara Sterling, Russ Brethauer, and John Conboy. George Rhenberg, Stephanie Davidson, and Rebecca Stewart

Altfeld also contributed significantly to the project. The work could not have been completed without the very important contribution of Judith Beam's secretarial assistance. Her willingness to work over and beyond what was necessary made this research possible.

The additional assistance of Bill Horr at the University of Alaska, Anchorage, is also acknowledged. Grateful appreciation is also due to Rita Dursi Johnson, Mary Parker, Kathie McDonough, and Sandi Alger for their secretarial support.

At the Los Angeles end of the production, support in terms of administrative, computer, and clerical assistance as well as Huba's salary was provided in part by a program project grant (DA-01070) to Dr. Peter M. Bentler from the National Institute on Drug Abuse. Janel Hetland and Bonnie Barron produced the final version of the manuscript on an IBM System-6 text editor. Janel and Bonnie contributed humor, diligence, and the ability to face endless rounds of scribbled thoughts that we were trying to dignify as paragraphs. William Wong-McCarthy and Clyde Dent helped with final computer analyses. Byerly Woodward aided in the final aspects of production.

Several individuals in Los Angeles provided professional advice and consultation that added immeasurably to the quality of the final manuscript. Dr. Peter M. Bentler repeatedly acted as a sounding board for various ideas, helped us to refine our thoughts, and commented extensively on portions of the manuscript. He was also extremely supportive of the preparation of the manuscript when, at times, it seemed that the project was getting in the way of Huba's other research duties. Dr. Bentler made facilities at the *UCLA/NIDA Center for the Study of Adolescent Drug Abuse Etiologies* available for the writing of the results and provided an extremely stimulating environment for the study of drug use and methodology. Many interchanges between Bentler and Huba resulted in additional research, which is cited throughout. Dr. Carol S. Aneshensel read the entire manuscript and commented extensively on substantive issues. Dr. Aneshensel helped to find loose ends in our arguments, present our thoughts more clearly, and organize the diverse materials that make up the themes for this volume. Dr. Aneshensel followed the manuscript through several drafts over a period of 2 years and suggested improvements at many stages.

A special acknowledgment is in order for the support, guidance, and assistance provided by Dr. Dan J. Lettieri of the National Institute on Drug Abuse. We also wish to acknowledge four institutions: Murray State University, Yale University, the University of Alaska, Anchorage, and the University of California, Los Angeles. The administrative support that afforded us the necessary investigators' freedom despite the "touchiness" of our domains of inquiry was remarkable. Provisions of space and facilities

were excellent. Our research was carefully scrutinized by committees of ethics of human investigation, and useful suggestions were received from them for protection of our student participants' rights.

Finally, of course, there are the more than a thousand undergraduates at Murray State and Yale who involved themselves in long hours of testing or experiments with remarkable grace and impressive candor. In addition to assigned code numbers to preserve anonymity, the participants were encouraged to use pseudonyms on all their test forms and communications with us. In our seemingly endless sorting of records and files of tests and interviews, we have developed sentimental feelings about those people who named themselves "Male Animal," "Hedda Gabler," "Kingman Brewster," "Martin Luther," "Marilyn Monroe," and dozens of other whimsical aliases. We thank them all for sharing a phase of their lives and private worlds with us.

BERNARD SEGAL
GEORGE J. HUBA
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1

A Perspective on Youthful Drug Use

Daydreaming, drug use, and drinking are often linked together by an older generation as among the most besetting vices of late adolescent and college-aged youth in this final third of the 20th century. In this volume, we describe a systematic attempt to explain the relationships between a conceptualization we call the *private personality* and the use of popular and rarely used psychoactive biochemical substances such as alcohol, marijuana, amphetamines, tranquilizers, hallucinogenics, and narcotics. Rather than accepting the a priori assumption that youthful substance use is a manifestation of "deviance," "psychopathology," or "emotional disturbance," our objective was to determine if substance use can be part of a normal growth of private personality during the college years. In summary, the vast majority of the young people studied are characterized by considerable self-absorption and substance use without serious consequence.

In this chapter, we discuss the theoretical considerations and previous formulations that shaped our view of substance use during the current historical period. In subsequent chapters, we trace: (1) the theoretical bases of the private personality concept; and (2) present data that show the linkages between different types of private personality style, daydreaming tendencies, and substance use. However, before beginning a formal review of issues relevant to studying drug use, it seems appropriate to state briefly the scope of the volume.

In this volume, we describe a series of analyses conducted with two large samples of college students at an urban, northeastern university and at a regional state university in Kentucky. Using extensive questionnaires, we examined the nature of the inner life of the students from their reports of

daydreaming tendencies and typical stream of consciousness. Additionally, the battery assessed self-reported hierarchies of needs and activity preferences. The different facets of private personality—inner experience, motivational structure, desired behavioral tendencies—were then related to patterns of substance use and the perceived motives for, and consequences of, using different psychoactive substances.

After probing the linkage of private personality and substance use, experimental studies were conducted to answer questions about the structural properties of the stream of consciousness, the determinants of ongoing thought, and possible adaptive consequences of the self-awareness of imagery and daydreaming processes.

It has often been assumed that extended daydreams or undue attention to one's ongoing thought and inner experiences may have pathological implications or, indeed, may actually be a precursor to emotional or social withdrawal. We infer, then, that if such pathological consequences of certain types of inner experience are true, it is quite possible that some individuals will turn to alcohol or other drugs in an attempt to self-medicate, or supplement, such inner reality. On the other hand, if certain forms of inner experience are adaptive for the individual, drugs may be used to induce desired states of consciousness. The data gathered for this volume represent the largest sampling to date of the private personality experience of college youth and concurrent drug taking. The primary questions asked in our various studies seek basic information about private personality processes and their importance for understanding substance use and potential abuse. We have also sought to examine more generally the nature of the daydreaming process and its tie to other facets of personality in young adults. The major questions guiding inquiry have been, "Is private personality closely tied to usage of drugs and alcohol among young adults?", "Is the capacity to enjoy inner experience a countervailing force against reliance on alcohol and other drugs?", and "To what extent is the private personality experience a determinant of substance use as a coping strategy?"

In the remaining pages of this chapter, we discuss the scope and nature of drug use in American society. We also review different theoretical viewpoints offered to explain youthful drug use, and we explore deficiencies in prevalent viewpoints that led to the theoretical perspectives presented here and in Chapter 2.

DRUG AND ALCOHOL USE: PUBLIC PASSION AND THE NEED FOR RESEARCH

Drug and alcohol use are not new to American society, nor are they new to any human society. In his classic book, Brecher (1972) shows that psychoactive chemicals have been ingested individually, as well as collectively, since

the beginning of recorded history. Brecher carefully documents substance use since the American colonial period and shows that drugs have been used for recreational, as well as self-medicinal, purposes whenever a supply was available.

A relatively recent development in American society, however, is the increasing frequency and intensity of substance use among individuals of college and secondary school ages. The recent trend has been supplemented with the extensive publicity that substance use has received in the new "global village" media period. Media presentations have emphasized the size of the "drug problem" and have graphically portrayed the "junkie" in numerous movies and television series.

In examining research conducted on youthful drug use, it is necessary to remember the social context in which research is conducted. Illuminatingly, the concern expressed today over drug use, particularly in high schools and on college campuses, closely resembles similar concerns of 50 years ago about college drinking during the days of the "flaming youth" of the 1920s. As Suchman (1968) points out, studies of college students in the last generation found alcohol to be the major campus "vice" and "alarming reports were published about drinking problems of college students [p. 146]." Public concern not only prompted the classic study of Straus and Bacon (1953) on college alcohol use but has since motivated numerous other investigators to examine college drinking patterns (see Glatt & Hills, 1968; Globetti, 1972).

As was the case with the study of alcohol consumption, recent public concern about drug use and abuse has resulted in the development of a large body of research literature attempting to explain the phenomenon. A good part of this scientific investigation contains a statement to the effect that the research is important because of widespread drug use among youth of the time (1960s and 1970s). Furthermore, much of this research focuses on determining the causes of youthful drug use. Although not often explicitly stated, many investigations proceed from the assumption that *drug use—the ingestion of any chemical substance for nonmedical purposes*—is tantamount to *drug abuse*. Accordingly, it was considered quite appropriate for the socially concerned behavioral and medical scientist to adopt the role of a fireman and come rushing to extinguish the drug-abuse forest fire!

Unfortunately, many studies undertaken *in reaction* to the drug-use problem paid little attention to the effects of drug laws, policies, and attitudes on the implicit assumptions of researchers. Interest centered on stopping or decreasing the problem immediately, with the consequence that scholars tried to develop a single simple explanation, or a small number of closely related explanations, to account for drug use. Today, such approaches seem overly simplistic: There is probably *not a single explanation for drug use at any stage of development*, and the problem is further compounded by a recent realization that many forms of drug use may not constitute drug abuse (Richards & Blevens, 1977).

4 1. A PERSPECTIVE ON YOUTHFUL DRUG USE

In any evaluation of the research literature on drug use, it is necessary to try to separate those studies primarily concerned with drug abuse from those in which drug use was the focus. The importance of this dichotomy is underscored by the conclusions of the National Commission of Marijuana and Drug Abuse (whose very title seems contradicted by the group's final report). That commission concluded that the term *drug abuse*, when used in reference to the use of any type of drug without regard to its specific pharmacological actions, is an eclectic concept with the only uniform connotation being *social disapproval*. The Commission (1973) further stated that "drug abuse" terminology should be deleted from official pronouncements and public-policy dialogue. In the words of the Commission, the term "has no functional utility and has become no more than an arbitrary codeword for that drug use which is presently considered wrong. Continued use of this term with its emotional overtones will only serve to perpetuate confused public attitudes about drug using behavior [p. 13]."

The emotional climate surrounding drug abuse during the last few decades clouded both public policy and research issues. With respect to research, reaction to public hue and cry has dominated the field and has almost precluded an approach oriented toward systematic scientific examination of the socialization patterns of various substance-user groups rather than an immediate solution to the perceived problem. Because of earlier public concern, there was a presumed need for explanation, particularly for drug use by the children of the majority group of voters. Not surprisingly, the explanations advanced often reflected the prevailing public attitudes. Consequently, concepts such as "alienation," "nonconformity," and a host of similar constructs (Sadava, 1975) have been suggested to account for youthful drug use and abuse. These earlier studies sometimes fail to contribute substantially to understanding the phenomena because of the presumed use-abuse linkage and the various methodological difficulties that were undoubtedly exacerbated by the "rush to put out the fire" ethos of the time.

The emotionality of prior years has moderated somewhat, and changes in political climate and research funding priorities have allowed research probes into drug-taking behavior to become more mature. More systematic research programs have been developed (see, e.g., Huba, Wingard, & Bentler, 1979; Jessor & Jessor, 1977; Kandel, 1978a, b; Kandel, Kessler, & Margulies, 1978; Lettieri, 1975; Platt & Labate, 1976; Smith & Fogg, 1977, 1978; Wingard, Huba, & Bentler, 1979), and more sophisticated design and data analysis strategies for conducting drug use research have emerged (see, e.g., Bentler, 1980; Bentler & Huba, 1979; Bentler, Lettieri, & Austin, 1976; Nehemkis, Macari, & Lettieri, 1976). Investigators now recognize that the use of drugs, including alcohol, is a complex multidimensional process influenced by a plethora of past experiences and aspects of the present environment as well as possible biological predispositions (Huba, Wingard, & Bentler, 1980; Kandel,

1978a). It is quite a positive sign that researchers have increasingly attempted to describe the interrelationships of different domains of causal factors in determining youthful drug use (Becker, 1974; Bentler & Eichberg, 1975; Gorsuch & Butler, 1976; Jessor & Jessor, 1977; Sadava, 1975).

Whereas significant progress has been made in systematically examining different clusters of causal factors for youthful drug use, there has been minimal effort to systematically differentiate types of use. Although certain alternate models for the phenomenon of drug use have been proposed—such as the stage theory of Kandel (1975a; Kandel & Faust, 1975), the multidimensional alcoholism structure of Horn (1977), the generalized smoking dimensions of Tomkins (1966a, b), and Carlin and Stauss' (1977) twofold table of polydrug use—it is fair to say that most studies still continue to treat the phenomenon as essentially unidimensional. Consequently, most investigations continue to contrast “users” with “nonusers” or “addicts” with “normals.” As the recent work by Kandel (1975a) in overall general stages of drug use suggests, such contrasts do have their place in understanding drug taking.

Recently, a new conceptual framework for drug-taking behavior has gained increasing acceptance among behavioral scientists. Since it has been recognized that the term *drug abuse* may not be appropriate, the phrase has been replaced by newer, perhaps more tenable, concepts of “deviant behavior,” “deviancy,” or “problem behavior” now employed in sociological and psychosocial studies of drug-taking behavior (e.g., Jessor & Jessor, 1977; Johnson, 1973; Kandel, 1974, 1975a,b, 1978a). This newer perspective illustrates best the extent to which the existence of a social “problem” depends on societal definitions at a given time. Thus the emotional connotations of the term *drug abuse* have led to a shift toward a concept that may represent a more tolerant view but that, nevertheless, labels drug-taking behavior as being apart and deviant from the values of society. Two major questions must be asked about this new emphasis:

1. Is drug taking behavior actually apart from the cohort norms of current youth, or is such behavior an integral part of growing up in the late 20th century?
2. Does a concept of deviancy imply a general explanatory construct for drug taking behavior?

Stating these two questions another way, where does the concept of deviancy leave us with respect to developing an etiology of youthful drug-taking behavior and its consequences? We contend that the concept of deviancy is insufficient as an explanatory construct and present our rationale for this contention in subsequent sections.

A question arising at this point in our argument is whether an explanation can be derived to help to understand drug-taking behavior. While it seems apparent from the previous discussion that no single, comprehensive explanation is possible, it seems reasonable that we may partially understand patterns of drug use by considering the social context, motives for use, and psychosocial concomitants pointed out in previous work. A reasonable beginning for our investigation, then, is a discussion of some historical conceptions of drug use; the relationship between drug laws, policies, and attitudes; and the derivation of conceptual frameworks previously offered as explanations.

HISTORICAL PERSPECTIVE ON AMERICAN DRUG USE

It is intriguing to note that the apparent general attitude among the American public is that drug use is a new phenomenon destroying the fabric of American life and that something must be done to stop the decay. Hence, news of large-scale “busts” of drug suppliers and the interception of drug shipments by law-enforcement officials is given emphasis in the print and broadcast media. Such attitudes that drug use is abhorrent are not new, nor is the response that drug supplies must be controlled. Public outcry in America during the 20th century has generally given impetus to a politicization of the drug problem that places responsibility for controlling use into the hands of government, law-enforcement agencies, and the courts. This process is particularly evident with respect to narcotic or opiate use, but the furor during July 1978 resulting from reports that President Jimmy Carter’s youthful White House staff used marijuana suggests continuing broad concern about a drug whose use is almost a normative behavior among those under 40 years of age.

The use of opium as a self-medicant for just about anything ailing the body was extensive during and after the Civil War. There was little popular support to ban opium use at that time, even though the intravenous effects and addictive potential of morphine had become apparent after the introduction of the hypodermic syringe in 1854. The byproduct of the analgesic value of morphine—addiction—was viewed as a medical problem, not as a deviant behavior (Goode, 1978). While the general public did not approve of addiction and the morphine-dependent individual was considered to be “sick,” he or she was not generally discernible because of atypical appearance, membership in a subculture, or rejection of the majority culture’s social standards. The addicted person, according to Goode (1978), was able to “live a more or less normal life, carry out ordinary, everyday functions—work, take care of family, attend school. There was no isolation or stigmatization of the addict before the turn of the century [p. 249].”

The change from the tolerant attitude of the past century and the current state of affairs appears to have originated in an attempt to control the widespread use of opium and its derivatives. Public interest in prohibiting opium use first started in San Francisco during the 1870s because of the belief that "many women and young girls, as well as young men of *respectable family* [italics added], were being induced to visit the [Chinese opium smoking] dens, where they were ruined morally and otherwise" [cited in Brecher, 1972, p. 42]. This first anti-opium legislative action was clearly a reaction to the social impact of the drug promoted by disapproval of the life style associated with (Chinese) opium use. Impetus for reform was also motivated by fear of the addict, especially when the drug-dependent individual was a minority member (Platt & Labate, 1976). Initial legislation in San Francisco was followed by a bill enacted by the New York State legislature in 1882 aimed almost exclusively at controlling the flourishing opium dens of New York City's Chinatown.

Although a multitude of significant national and international treaties and agreements attempted to control the opium-use problem around the turn of the century (see Brecher, 1972; Kramer, 1972), the major legislative consequence of the public concern was passage of the Harrison Narcotic Act in December, 1914. After enactment of the bill, unauthorized sale, possession, or purchase of narcotic drugs became a criminal offense, and nonmedical narcotic use was considered an illegal act. The social implications of the Harrison Act were further heightened by the stringent manner in which law-enforcement agencies chose to interpret the law. Most significantly, the United States Treasury Department (in a decision later upheld by the Supreme Court) decided that physicians could not prescribe narcotics to an addict for the purpose of maintaining an addiction, even though the Act included the statement that physicians could provide or prescribe narcotics in the course of professional practice. The courts ruled that providing an addict with opium merely sustained the addiction rather than constituting treatment for withdrawal symptoms. It was this interpretation of the Harrison Act that paved the way for a punitive orientation toward narcotic use and ingestion of other chemical substances such as cocaine.

After the Harrison Act became law, the climate was ideal for the development of an illegal drug market. Since medical treatment (through supply of the drug) was no longer available for the withdrawal syndrome, "underground" use became common. As the Harrison Act was modified through additional legislation and court decisions to include other chemicals used as substitutes by formerly opium-dependent individuals, users began to engage in illegal activities to pay the exorbitant prices charged for drugs in the underground market. Increased illegal activities, of course, caused high arrest and conviction rates for addicts, and it was not surprising that the public came to perceive the addict as criminal and deviant. Finally, narcotic users typically became confined to urban ghettos and invisible to the majority of Americans.

As long as the drug problem remained in the ghettos among poor and minority groups, the phenomenon posed no generalized threat to the public as a whole.

The "problem" of drug use, of course, did not long remain isolated in the ghetto away from mainstream America. Drug use leaped into the American consciousness in the 1960s after slowly trickling in after World War II. During the protest era of the 1960s, drug use became more blatant and visible, but the trend had started far earlier as the products of pharmaceutical research had become "miracle" drugs for the psychiatrist and general practice physician to prescribe for mental health problems. Barbiturates, amphetamines, LSD, minor tranquilizers, and antidepressants moved from the sophisticated laboratory to the physician's prescription pad to the street as drug abuse. Furthermore, drugs with long histories of use in America, such as marijuana, cocaine, organic hallucinogenics, and alcohol, began to be purchased illegally by an increasingly large and visible segment of the population.

Public reaction was swift, although well behind the peak of major increases in use. Once drugs began to invade the middle-class suburbs, there was again public outcry to combat the "epidemic" sweeping the country. Drugs long identified with economically disadvantaged and minority-group individuals were now used by an identifiable (by means of clothing and lifestyle) minority of suburban adolescents and young adults. Furthermore, psychoactive "prescription" drugs such as amphetamines and barbiturates could now be obtained rather easily. The state of affairs and perceived threat of invasion from the minority ghettos paralleled the situation with respect to opium use encountered almost a century earlier. Additionally, the drug use of the 1960s and 1970s was associated, in the public mind, with unconventional life styles and political views; broadcast media of the time frequently portrayed the protestor against international and domestic policies as "high on drugs." Once again the public demanded federal intervention. And once again the government responded with major legislation.

The Comprehensive Drug Abuse Prevention and Control Act of 1970 brought control of all drugs, whether involved in interstate commerce or not, under federal jurisdiction. In superseding previous laws, the act established federal enforcement and prosecution for any illegal activity involving controlled drugs. Surprisingly, the law, for the first time, called for the reduction of penalties for "onetime" users, particularly for those possessing marijuana. Emphasis was directed primarily toward drug distributors. Provisions were also provided for treatment and prevention of drug abuse as well as the rehabilitation of drug addicts, but much more money was spent on the law-enforcement aspect of drug use than on treatment and prevention (Lewis, 1976).

The major accomplishment of the severe legislation and "tough talk" of the early 1970s, apart from a temporary decline in overt, visible drug use, was an

assuagement of public demands. This political approach, for as long as the society continues to view drug use as a form of deviant behavior, only ensures that the government will continue to play an important role in the response to drug use. A significant effect of the punitive approach to drug use is that: (1) reliance on treatment programs to rehabilitate drug abusers is lessened; and (2) the intervention that is provided is sometimes coercive. More importantly, however, the federal government, through its control over access to psychoactive drugs and funding, determines (sometimes benevolently, other times not) what forms of treatment will be provided. Society has come to equate drug use with criminal behavior and mental illness and has correspondingly demanded that the government be compelled to regulate both drug availability and conditions of treatment (National Commission on Marijuana and Drug Abuse, 1973). Treatment is thus equated with punishment, which not only potentially minimizes treatment outcomes but also limits the development of innovative strategies for combating chemical dependency. As long as basic treatment decisions rest primarily with law-enforcement agencies with power to place users in facilities, it becomes difficult to conclude that progress has been made in the "war" against drugs. As Lewis (1976) reports, "That such tactics fail is confirmed by the figures released by NACC in 1971 showing that for the \$345 million spent since its inception, fewer than 200 addicts have been released as cured (i.e., totally drug-free) and stayed cured from a civil commitment population in excess of 20,000 [p. 32].' From being regarded as deviant, the drug user was then regarded as a criminal, then a diseased person, and now a criminally diseased deviant (Lewis, 1976).

The foregoing comments, of course, are not meant to imply that there is not such a phenomenon as drug abuse, or more properly, maladaptive patterns of substance use that can lead to physical, psychological, and social damage for the individual and others. Staggering numbers of individuals are killed each year in automobiles driven by intoxicated drivers, millions of worker hours are lost due to drugs, and various criminal activities are committed under the influence of alcohol and other drugs. On the other hand, socially maladaptive behaviors (which might be called substance *abuse* behaviors) are committed by a small number of the total group of users of substances. Consequently, while there is a definable and "real" substance abuse "problem," the maladaptive consequences of drug use for some individuals must not be equated with the use of drugs by all individuals unless it can be *empirically* demonstrated that use and abuse are synonymous.

Also, we should point out that we do not mean to imply that public concern about maladaptive drug use is unfounded; in the current historical era, private citizens have taken the positive step of becoming increasingly aware of the potential damage of food additives, asbestos, industrial pollutants, and radiation. Given the wide concern about the danger of physical substances, it

is not surprising that there should be concern about the potentially dangerous effects of psychoactive substances. What we are pointing out is that while alcohol use is frequently differentiated from alcoholism, marijuana use is not as often considered separate from drug abuse; this lack of differentiation is apparent in the criminal laws that still cover the use of marijuana at the federal and state levels.

We have little doubt that public reaction to drug use and legislative response have, over the decades, combined to affect the attitudes and approaches taken by behavioral scientists—particularly psychologists, psychiatrists, and sociologists—toward developing an explanation of drug use and corresponding methods of alleviation. Furthermore, the attitudes and results of respected professionals studying drug use have then served to reinforce more general public beliefs and appeals for legislative action. The following sections explore some of the approaches taken toward drug use.

THEORIES OF DRUG USE

With all the past and present public outcry over drug use, the question arises why drugs continued to be used. That is, what is there about the drug experience that perpetuates drug use, particularly among nonaddicted individuals, in the face of disapproval from the majority of society? Drugs are used, it would appear, to obtain desired effects—to help the individual to feel or experience something uncommon, to change a mood or alter one's experiences and state of consciousness. Each of these two themes is discussed more fully in later chapters, as one of our primary interests in this volume is to probe the relationship between personality and self-reported motives for drug use.

The Psychopharmacological Model

The reasons for using drugs are not unrelated to their specific pharmacological effects, although, as attribution theory (see Schachter & J. E. Singer, 1962) has pointed out, the situation of use partially determines the individual's subjective response. While the pharmacological and physiological properties of most chemical substances are fairly well known (Julien, 1975), the psychological experience involves significant individual variation contingent on many factors such as: (1) individual physiological intolerance; (2) expectations of drug effect in the dosage consumed; (3) the setting for use; (4) the purity of the chemical combination and level of potency; (5) susceptibility at the time of use; (6) method of administration; and (7) previous experience with the drug. Although all of these factors contribute to variations in how drugs are experienced, it is nevertheless possible to discuss drugs in terms of their chemical actions and describe generally what the

psychological effects are. In the study of drug use, knowledge of chemical actions is valuable in attempting to understand and infer the relationship between personality and the motivation behind ingesting the drug. At this point, we characterize briefly the typical effects of the group of drugs that are discussed further in subsequent chapters:

1. *Opiate narcotics.* Included in this group of drugs are opium, heroin, morphine, codeine, and other opiate derivatives. The principal therapeutic use of opiates is for the relief of pain, but they also alleviate coughing and diarrhea. The use of opiates seems to cause a subjective experience characterized by an extremely pleasant euphoric state, warmth, well-being, peacefulness, and contentment. A pleasant dream-like state of consciousness can also be induced. Not all reactions to opiates are pleasant, but narcotics seem to be primarily used in anticipation of the relaxed state they produce and the euphoric experiences of the drug.

2. *Generalized depressants.* These drugs are chemical agents that depress the central nervous system. Among the generalized depressants are barbiturates, alcohol and the "major" and "minor" tranquilizers. Although both alcohol and barbiturates are similar chemical compounds, the social and legal aspects involved with alcohol necessitate that they be treated separately; because alcohol is used so widely in American society, it deserves special attention.

- a. *Alcohol.* As with other types of depressants and narcotic agents, alcohol is potentially addicting. Alcohol is capable of producing clinical effects such as sedation or sleep, but it is used more typically for its intoxicating effects. Among the well-known effects of alcohol consumption are a lessening of restraints on speech and behavior, mild euphoria, self-confidence enhancement, and a disruption of motor coordination. The behavioral reaction to the state of disinhibition engendered by the drug is not uniformly predictable; amount of alcohol consumed, setting, and expectations play a major role in determining the exact reaction.

- b. *Barbiturates.* The most commonly used barbiturates are short-acting agents such as Nembutal, Seconal, and Amytal. All of these compounds are potentially addictive and induce calming and sleep. Barbiturates are widely used as "downers" to bring oneself down from a normal state of consciousness or from a condition brought about by stimulant drugs. Barbiturates are also known to induce a behavioral state that is virtually indistinguishable from alcohol intoxication, including behavioral disinhibition, and a mild state of euphoria might be experienced at that time. Negative or violent reactions are also not uncommon. High doses lead to behavioral depression and sleep.

- c. *Nonbarbiturate tranquilizers.* Nonbarbiturate tranquilizers are relatively recent pharmacological products developed for alleviating mild anxiety and depressive states. Among the minor tranquilizers are the well-known