Chapter 4
Psychological Aspects of Substance Use and Abuse

Note: Much of the psychological terminology that is covered in this chapter is a brief version of what may be found in most college-level, introductory psychology texts, such as Psychology (H. Gleitman, 3rd ed., 1991 (New York: W.W. Norton) and Introduction to Psychology (J.W. Kalat, 2nd ed., 1990 (Belmont, California: Wadsworth). What is special to the chapter is a discussion of the way these concepts relate to the use of alcohol and other drugs.

Introduction

In Chapter 3, we described how certain characteristics of people (gender, ethnic group, or stage of life) allow us to understand aspects of their behavior. For example, based on gender classification, women more often overuse diet pills, while men are more likely to use alcohol to excess. When we consider stages of life, teen-agers typically act more like each other than like their parents when they drink alcohol or take other drugs.

There are other characteristics, based on the circumstances that people find themselves in, that social scientists have also seen as a kind of common background from which one can anticipate similarities in the way people behave. Thus, living in a small town as compared to the inner city is likely to make differences in people's patterns of alcohol or other drug involvement. A person's occupation, level of income, or education are other characteristics that provide a kind of shorthand that allows us to anticipate how they may act, and even what kind of drug(s) they may prefer.

We also know that these behaviors may vary for people from different cultural backgrounds. And, within each of these groupings, there are exceptions to these general rules.

Understanding why some individuals behave according to the general groupings, and why others do not—the "study of individual differences"—is an area of psychology that is important for our understanding of substance use and abuse. In this chapter we will also discuss how people get to be one way or another; that is, we will discuss the process of **learning** that leads people to act in different ways.

The Concept of Behavior

People differ both biologically and psychologically. In this chapter we will focus on psychological characteristics. People differ in the way they act (their **behavior**) and feel (their affect). Such differences are called "individual differences." And one reason why alcohol and other drug use is so common is because it changes behavior and affect. That is, we really act differently and think differently and even feel differently when we've taken a drink or drug than we do after it has worn off.

Most people do not regard *thinking* and *experiencing* as actions; one cannot see them, they hardly seem like they involve any energy, and they come and go without anyone needing to do anything. However, psychologists regard these "hidden events" as mental actions whereby separate thoughts and feelings influence each other and change as the thinker examines or pursues an idea. Thus, human beings are *acting*, whether they take drugs or "just say no," whether they drive or

walk, talk or remain silent, or experience feelings like love or hate. All of these actions are what psychologists technically call behavior. It is the study of behavior that distinguishes psychology as a discipline from its neighbors, sociology and biology.

Behavior is one area where the influence of surroundings (social contexts) and biological influences have impact. Alcohol and other drug use and abuse are all patterns of behavior by individuals, living and operating in social contexts, who are, themselves, biological as well as psychological and social beings.

How these different influences act and change people's behavior is a core issue in understanding differences that people show in their use of alcohol and other drugs. These are complex processes because these individual influences operate on each other, yet to some degree are separate. To make this task a bit easier, we'll limit our discussion to just a few of the core psychological processes which are important to alcohol and other drug involvement.

Some Key Psychological Variables

As already noted in Chapter 3, socialization is the process of learning by which the culture teaches rules about how to live, how to relate to other people, and about right and wrong as the child is growing. The family is the primary group that carries out socialization, but at later ages the schools, one's peers, and other social contacts play an increasingly important role. In Chapter 3, we focused mostly on the societal elements of socialization. In this chapter, we'll focus on socialization as a psychological process, involving changes in the individual's pattern of behavior as learning takes place.

During the process of socialization, children learn the language and rule structure of the society. As part of this process, they also develop a set of ideas about who they are—what psychologists call the "**self-concept."** Because they grow up in a society that uses a wide variety of drugs, everything from aspirin to coffee, to alcohol, to marijuana, to cocaine, children also learn about alcohol and other drugs early in their lives. They develop **attitudes** and **values** about drugs which help to shape and maintain their own patterns of alcohol and other drug use as they grow older. Thus, if we are taught early in life that drugs are "good," we are more likely to use them as we grow older. This is all a part of what is meant by socialization.

Learning what is special about one's own culture is also a part of the socialization process. And the learning of gender differences, how to be male or female, within one's own society is a vital part of this lesson. By way of socialization, we teach girls and boys what is acceptable behavior for them, which in turn affects what they learn, and also how easily they are able to practice it and feel comfortable about behaving in the acceptable way.

> Sally is 14, spends most of her after-school time with other girl friends, and spends a great deal of that time talking about boys and about clothes. The girls frequently spend Friday and Saturday nights together, and more often than not end up at the mall, where they run into other girls and guys from the high school. Also, at least once a month, they will all sleep over at one of the girls' houses, call boys they think are cute, and also dedicate songs to these boys on the radio station that everyone listens to. Last Friday night they stayed up late after Sally's parents went to bed, and one of Sally's friends suggested they sneak some bourbon from the family liquor cabinet. Sally felt uncomfortable about this,

although she went along with the suggestion, but had less than a full sip on her own. Two of the other four girls did the same, one said she did not like the taste and had none, and only the one who had urged Sally in the first place had anything at all to drink. Sally ended up feeling uneasy about this incident for several days afterward, even though she said nothing about it to her mother or father.

Bill is 14, spends most of his after-school time with his buddies, and is busy figuring out how to get a part-time job so that he can buy a Camaro when he turns sixteen. Bill almost always spends Friday and Saturday nights with his friends, and more often than not ends up at the mall, where they run into other guys and girls from the high school. Also, at least once a month, he'll stay out late, and sneak into the house after mom and dad are asleep. His parents haven't caught him yet, and even if they did, they would probably understand that he was with his friends, out chasing girls. Last Friday night Bill had a bunch of his buddies over to watch the Tigers game, and they stayed up late after his parents went to bed, flipping channels and looking for some interesting action show. One of Bill's friends suggested they sneak some bourbon from the family liquor cabinet. Bill thought this was a good idea, because he had seen his father drinking the stuff, and always wondered what it tasted like. He ended up having a couple of swigs, as did two out of four of his friends. One of the other boys felt uncomfortable about this, and ended up agreeing, but only pretended to have a sip, and one had considerably more than a couple of swigs. Bill ended up feeling it had been a pretty interesting evening, and next weekend, he and his friends even bragged about it to some of their other buddies.

More generally, the unique experiences and exposures we each have as we mature help to determine our later behaviors and the way we feel about them. The earlier experiences are not the absolute determiners of what we do later, but they play a very important role as the "launching pad" for what takes place later. And they sometimes re-emerge for us, even when we think we may have left them behind.

Jan is 31 years old, and is the child of an alcoholic father. She is quite successful in her work, and loves her family, but feels a nagging sense of insecurity and anxiety even though her adult life is going well. She is glad she and her sisters and brothers were able to leave a troubled family life behind after her parents divorced. Yet although she knows these experiences are ended, she continues to feel insecure, as a kind of memory of her earlier socialization; she periodically remembers the conflict, the fights, the sense of insecurity of childhood, and is not easily able to push it away, even though it seems inappropriate for the present.

Reinforcement and the Momentum of Ongoing Behavior

Processes within the individual that do not necessarily even register in conscious thought will also affect us. Our behavior is not only influenced by what we think and want, but also by the ongoing pattern of connections of our actions. Some examples are the positive feelings generated by (for smokers) having the first cigarette in the morning, by a jog at the end of the day, or by the sense of familiarity one gets in eating a meal that was our favorite. This positive feeling stems from a whole set of small connections that we have made between the activity and the experience of pleasure. So when we start to do the same things again, the memories of pleasure connected to them are likely to encourage us to do them even more.

These examples illustrate the power of **reinforcement**. Reinforcement is a positive experience that occurs along with something else we are doing. The positive experience may occur because something pleasurable happens along with what we are doing, or it may occur because something unpleasant is terminated at the same time as the other activity we are doing. In either instance, we say that the second activity has been reinforced. When reinforcement takes place, we are more likely to continue the activity and engage in it repeatedly.

In contrast, the experience of punishment (technically called **negative reinforcement**) will act to suppress (or push down) those activities that are going on at the same time. In the long run, for many reasons, punishment is not as effective as reinforcement in directing behavior, and it does not create new learning. There is an important practical implication here: prevention and treatment strategies that focus primarily on *punishment*, or the withholding of rewards, are very likely to be ineffective over the long haul.

Both reward and punishment are aspects of reinforcement and are important as a background for understanding how alcohol and other drug use behavior can be learned and maintained. Thus, use is likely to continue when the early feelings triggered by the alcohol and other drug experience are pleasurable (that is, when they are reinforcing), or when the alcohol and other drug experience allows the individual to avoid feelings or situations that are painful, uncomfortable, or difficult. In both instances, the person will be more likely to continue the alcohol and other drug involvement thereafter.

Old patterns of behavior or habits are likely to continue (see the earlier vignette on Jan). They may require persistent effort and attention to change them. Our behavior stabilizes because of the many influences that surround the activity and encourage (or reinforce) its continuation.

Individual differences in what people experience as reinforcing also plays a role in determining how easily learning takes place—and whether it occurs at all. There are individual differences in the reinforcing and aversive (unpleasant) experience of alcohol and other drugs, based on biological differences, some of which may be genetic. Biological differences in experience affect whether, and how, a particular drug is reinforcing. Some people become sleepy as soon as they have had one or two drinks; others are energized, become loud and boisterous, and want to drink more. Others become flushed and feel ill or nauseous when they drink. These individual differences in response will then make it more or less likely that a person will welcome or even seek out their next alcohol or drug-taking experiences.

Some of these differences are undoubtedly a part of our biological makeup. However, it may be wise to keep in mind that, even though some people may have biological propensities or experience social pressures that make alcohol or other drug use appear more desirable, others with similar backgrounds will not become heavier users.

In alcohol metabolism, one important system involves the metabolism of alcohol into acetaldehyde by the liver enzyme known as alcohol dehydrogenase (ADH). This step is quickly followed by a breakdown of acetaldehyde into acetic acid by aldehyde dehydrogenase. (Acetic acid is a common substance found in the body and used as a source of energy.) These two types of enzymes are of special interest to alcohol researchers because their activity varies markedly among different people. For example, alcohol dehydrogenase may work very rapidly in certain ethnic groups (as in 30-50 percent of those of Asian background), and so acetaldehyde levels will be unusually high after drinking. This would not be more than a curiosity, except that high acetaldehyde levels produce a number of uncomfortable effects on the body including flushing of

the scalp, neck, and upper chest, accompanied by migraine-like headaches, difficulty in breathing, heart palpitations, and nausea—symptoms that resemble a mild form of Antabuse® reaction. It is as if the body has a natural system that produces symptoms like those experienced in alcoholism treatment (which are intended to discourage drinking). People who have this form of alcohol dehydrogenase, and who experience the unpleasantness with drinking tend to drink less and apparently have lower rates of alcoholism.[1] But this is not a simple matter, for all ethnic groups that experience flushing do not have lower rates of alcoholism. A case in point is that of Native Americans who, as a group, experience higher rates of alcoholism in spite of the aversive experience.[2]

So the problem is considerably more complex than a simple and straightforward vulnerability if you have certain genes that are responsible for a particular form of an enzyme. It appears that many other influences are a part of the cultural context in which learning to drink takes place and, together with the underlying biological mechanisms, they shape behavior.

Learning

Not all learning occurs by the process of direct reinforcement. There are two other kinds of learning that are necessary in understanding how knowledge and behavior relating to drugs and alcohol are acquired, and how they are maintained. One kind of learning is **classical conditioning**, and the other is **modeling**.

Classical conditioning is a process that is probably central to the development of a need for drug experiences because it provides some explanation about why people may feel uncomfortable or anxious without being aware of why they feel that way. The simplest example of this process comes from a famous experiment by an American psychologist in the 1920s, who noted that one could produce a very strong physiological effect (like fear) even if there was nothing external to be afraid of—if the original fear stimulus had previously been experienced *at the same time that another neutral event was being experienced.* For example, if you were smelling roses at the same time that a very loud and frightening noise occurred (such as an explosion), by the simple process of pairing (what we call classical conditioning) you would be likely to experience fear when you smelled roses again, without any sense of why you felt that way.

Modeling (also called imitation learning) plays a powerful role in determining what we do, both as children during the process of socialization, and at other times in our lives. Modeling refers to the observation and imitation of the actions of other people who are close to us, and who are typically in positions of admiration and power. We want to be like our parents if they have been good to us, and as we grow older we pick other individuals we admire to model. Much of what is learned with peers, both in adolescence and throughout our later lives, is learned by way of this process of modeling.

The Role of Cognitive Processes and Expectancies

Cognition refers to the ways that people think, how they interpret what they see, hear, touch, taste, and smell, and the frameworks people use to understand themselves and the world around them. Cognitive processes include thought and language, and the rule structures that govern how we think, reason, and remember. They give meaning to those quick and fleeting images that are the original stuff of consciousness. Language rules tell us that time moves forward, but never

backward, and it sensitizes us to those aspects of the environment that are especially important to our lives. So the cook knows that there are many levels of heat for the burners on the stove, that will give a simmer all the way to a rolling boil, and the Eskimo knows that there are eight or nine different kinds of snow, when all the rest of us know only slush and powder and wet snow, and the alcoholic knows the difference between a pony and a pint of beer. The important point to remember is that language gives us categories to organize our experience, and if we have more categories, our experience will be different from that of the individual who has fewer categories. So the cognitive structure we develop is a function of the experience we have, then begins to shape the later experience we have.

The **placebo effect** (that is, experiencing effects based on what you *think* a substance should do, rather than on its pharmacological action) provides an example of the complex interplay between biological and psychological functioning. For example, in a well-known experiment, people who were informed that they were getting alcohol—but actually were not—reacted more strongly than did other individuals who actually were given the drug, but were told they were just getting fruit juice! The placebo effect is an example of another factor which varies in strength for different people. Psychologists call it **expectancy**, which is our tendency to experience what we *expect*, whether or not it really occurs. Expectancy is operating when we selectively remember only the aspects of a situation that agree with what we thought would happen.

People who expect a drug to make them feel better or give them confidence or make them socially more adept may, indeed, be more motivated to indulge in the drug. It is generally believed that expectancies operate in conjunction with biological disposition and other influences in determining who is more likely to develop serious problems with a drug.

Generally speaking, expectancies are motivational factors. The ideas we have about the outcomes of our actions tend to lead us to seek out some experiences and avoid others. If an idea about what might happen does not exist for us, we cannot very well be motivated by it. But if we have the idea, then we may think we want to pursue the activity. So, if we do not feel good, and our expectancy is that drug taking will make us feel better, this expectation is also likely to motivate us to seek out a drug source and consume the drug.

Personality Factors and Drug Involvement

Other psychological factors also affect our behavior, and are known to be different in different individuals. Those factors which guide and direct our behavior, and which are known to have some degree of consistency across situations and stability over fairly long periods of time are called **personality**. One example of a personality factor is **temperament**.

Temperament refers to the stylistic characteristics of behavior, how Joe or Jane usually act, not what they are doing.[3] Temperament is concerned with the tempo of activity (how rapid or slow it is), how emotional it is (with a lot of emotionality or a little), how flexible or rigid the behavior is, and so on. Temperament is shaped both by constitutional factors (that is, what is passed on to us genetically) as well as by the interplay of the child with his or her environment.

Your temperament (emotional predisposition) helps to determine your energy level, moods and mood changes, and the intensity and tempo of your reactions to people and situations. Individual differences in temperament help to shape the level of interest in and/or need for alcohol and other drugs that different people experience. In recent research on the origins of alcohol and drug use, it

has been proposed that an excessively high activity level in the early childhood years is linked with the later development of a more aggressive lifestyle. This, in turn, has been linked to earlier involvement with peers who get in trouble and who are more likely to abuse alcohol and other drugs.

Temperament may also affect one's choice of a drug. For instance, a person with a high energy level, who also gets anxious easily, may be more likely to seek out a "downer" drug, or alcohol, that can help to lower the high energy levels when they begin to get uncomfortable. On the other hand, people with low energy may be attracted to stimulants to help them get going, much in the way that many people rely on one or more cups of coffee to help them wake up in the morning.

This long "chain" of relationships with many links illustrates the complex interplay of one factor upon another in what later may be viewed as "just a drug problem."[4] The chain begins long before the drugs become a part of it, and these other, earlier links are equally important to know about. From a psychological point of view, we can see that the development of individual differences in alcohol and other drug abuse is a long process and that it is influenced by a number of different factors.

Even though *stability* in the way people act is one fact of life, the fact that people also *change* is just as important. We know this from our own lives. We do not remain the same from childhood, through the teen years, into adulthood, into middle age, and into the later years of our lives. While our core identity continues to exist (this is also a part of personality), it shifts as our bodies grow and change, and the "world" we live in makes different demands of us at different age-stages.

The process we are describing is **developmental change**; some of it is the result of maturation, and some of it is regulated or elicited by the environment we live in. As noted in Chapter 3, life transitions are critical periods that call forth major changes. At the same time, they are periods of high risk, as well as opportunity.

Transitions, such as moving from childhood to adolescence; acquiring a new life partner (or breaking up a life partnership); experiencing the death of a child, partner, or other relative; experiencing the birth and developmental changes of one's children; being laid off from a job; changing employment; or retiring are periods of instability when powerful feelings are unleashed. The individual challenge, then, in a time of upheaval, becomes one of seeing the opportunity and acting on it. When this does not take place, what may appear instead is an interval of considerable strain, personal turmoil, and sometimes increased involvement with alcohol and other drugs.

Developmental change has some characteristics that are similar across cultures and ethnic groups (like acknowledging the change of puberty that brings about sexual maturation), but many characteristics are different. Various cultures and ethnic groups frequently have very different rule structures about what people in that society or group need to know and do at different times in their lives. Ethnic and cultural groups expect certain types of behavior from their members at different stages of the life cycle, and they also teach different things relating to how one should act at those times. This is partly the reason why patterns of alcohol and other drug use and abuse vary so widely from culture to culture, from ethnic group to ethnic group, and from age to age. Alcohol or other drug use is virtually always a social act as well as a personal act, but it is also what we call an age-graded activity. It varies with the territory that is part of each age-stage of the life cycle.

It is important to stress that later experience is important too. It can help to drive an individual further into drug- or alcohol-involved activities, or it can help make that less likely. As life stages change, some new element in the system may start to make a difference, and along with that produce a major change in alcohol and other drug consumption. No one consciously sets out to be an alcoholic or an addict. But the chain of events, involving biochemical response systems, personal needs, and peer relationships that encourage and help to maintain use are all part of the process that can lead the individual further into trouble.

It is well to keep these competing tendencies in mind when planning treatment or other preventive interventions to help people who have or may develop problems related to alcohol and other drug use. They will resist behavioral change until the forces promoting it are compelling. To make such change permanent, the new behavior must persist long enough to become habitual, and perhaps form a new base for continuing growth within the changed environment.

Does the "Addictive Personality" Really Exist?

We mentioned earlier that some terms which have been widely used in the field are too imprecise to be very useful. Often their meanings are hard to determine because the definitions vary greatly between people. Sometimes their popularity is greater than the factual evidence for their existence. The term "addictive personality" has all of these shortcomings.

There is considerable agreement that alcohol and other drug problems have a biological component, manifested by a physiological need for a substance that one has taken for long periods in large quantities. When the person stops taking the drug, "withdrawal symptoms" occur until the body adjusts to the absence of the drug. But such problems often have a psychological component as well. For those trying to escape frustrating realities, those substances which have the powerful reinforcing properties of alcohol and other drugs simultaneously call forth an emotional response that promises a welcome haven or escape. Long after withdrawal symptoms have disappeared, persons recovering from their compulsion may experience strong cravings for alcohol or other drugs which have previously been experienced as reinforcing. At these times, the risk is great that they will return to their compulsive drinking or drug taking.

In their attempts to understand alcoholism, early researchers hypothesized that the small number of drinkers who become alcoholic must somehow be different from "normal" people. Thus began the search for the "alcoholic personality." The term persisted and was joined by "addictive personality," even though research findings from 1950 to the present have been unable to demonstrate a typical set of pre-existing personality traits for all compulsive drinkers or drug takers. The use of these terms seems to have persisted because there is a core of characteristics that is sometimes noted by treatment workers *after* problems have developed. The commonality of pattern, however, is the *result* of sustained use over a period of time; it is not the *cause* of such use.

Is there an alcoholic or an addictive personality that causes the development of problems with alcohol and other drugs? No. But there *is* value in considering character or personality *traits* which tend to appear in certain individuals and contribute to a predisposition or vulnerability to excessive drug involvement.

Examples of predisposing factors include low self-esteem, a history of having personally seen drugs used to escape reality, an antisocial history, a family history of alcoholism, and recent

divorce or job loss. These predisposing factors heighten risk for problems with alcohol and other drugs. Taken alone, they will not lead inevitably to problems, but they are often part of the "bigger picture." And they also put people at risk for other types of problems. To the extent that individuals share a common history of these experiences, then the likelihood is greater that they will become involved in a substance-abusing career, or stay in it, once they have gotten there.

"Co-Dependence" and Family Systems: The Social Psychology of Involvement with Alcohol and Other Drugs

Co-dependence is another term which has been so widely used in the field to label so many different phenomena that it has lost its utility. Ten years ago, professionals treating alcoholics often ignored the patient's family. If they did intervene with the spouse or other family members, it was to enlist help in keeping the alcoholic sober. Although Alanon was dedicated specifically to helping family members cope with the problems of living with an alcoholic, most therapeutic services did not address this issue.

In 1981, in a Gallup survey, a quarter of those questioned claimed that an alcohol-related problem had adversely affected their own family. Other studies showed that a significant proportion of problem drinkers were members of intact families. The often-noted phenomenon that "alcoholism seems to run in families, generation after generation" began to take on a new significance as researchers and therapists focused on family dynamics. They argued that, although a specific family member may be the identified patient, his/her problem could not be adequately understood and treated without addressing the interactions of the entire family group.

In a family where one or both parents are alcoholic, other family members may adjust to the dysfunctional behavior of the alcoholic member(s) to avoid disrupting family living patterns. Family members may, like the alcoholic, deny that a problem exists. This also is not uncommon when the person with problems is one of the children in the family.

The whole family may become increasingly isolated from outside relationships, and it may reorganize its functional roles in ways which exclude (and protect) the alcoholic member from responsibilities. Such families are at high risk for violence or neglect to occur toward a spouse, child, or elderly family member. They are characterized by poor communication and failure to recognize or accept responsibility for the problems arising therein.

Children in such families may develop problems with alcohol or other drugs themselves as they grow up. About one-fourth of the alcoholics in randomly selected groups have at least one parent who was alcoholic. Though genetic and other biological factors are partly responsible, what we have said about this socialization process should alert you to the fact that family environment also plays an important role.

As you might expect, within an "alcoholic family," there are clearly individual differences in the life paths that different children follow. Some will copy their parents' drinking habits; some will suffer from low self-esteem and have great difficulty forming close, lasting relationships and trusting others in their world. While this may be appropriate survival behavior in that setting, when these children mature and leave home to establish their own adult lives, these patterns become inappropriate and maladaptive. Yet they may be all they have learned.

Remember that not all children growing up in an alcoholic family appear to be damaged by that

experience. Some manage to do well, perhaps due to a special relationship within the family that insulated them from difficulty, or perhaps because when they were at a critical life stage, the family's stress was not so great, or perhaps for other reasons. We do not yet know enough about these variations in outcome, although we do know that the variations exist.

Although families of persons abusing illegal drugs have been studied less, many of the same "survival" dynamics appear to be operating. Studies of adolescents undergoing treatment have established a strong link between teen-age emotional problems or involvement with drugs and the presence of parental alcohol and other drug abuse in the family of origin. And other work has suggested that unresolved issues relating to the transition from adolescence to adulthood, sometimes described as problems of "leaving home," are also a part of these difficulties.

The term co-dependence was coined to refer to the tendency of other family members to focus on the needs and wishes of the alcoholic, or more generally, to be preoccupied with the welfare of others to such an extent that their own needs are severely neglected. They seem to judge their own worth in terms of how well they shield the addicted member from experiencing the consequences of his/her compulsion. (This is probably best illustrated by the popular AA joke about the co-dependent who fell off a cliff. As she fell, the life of her alcoholic spouse flashed before her eyes.)

The term gets into trouble when it is used to describe a person, rather than a relationship. When it is split apart from the system of relationships and used to label individuals, it loses its meaning and dynamic force. There is probably little doubt that co-dependent relationships exist and that they powerfully influence the interactive dynamics of troubled family systems, but the term has become so inexact and ambiguous in common usage as to be nearly worthless.

The Complexity of Involvement with Alcohol and Other Drugs

About 40 years ago, two eminent social scientists noted that, "In some ways, every man[5] is like *all* other men, in some ways like *some* other men, and in some ways like no other man."[6] Biological variation, on the one hand, deals with that which is common to us all, and cultural variation deals with that which is culturally universal (for example, all cultures have a rule structure pertaining to how the young should be socialized), as well as that which is culturally specific (common to some of us). Psychological variation is concerned with linking these two, in some ways dissimilar, sources of influence. It is concerned with how universal processes of learning, socialization, and development are played out in such a way that establishes and maintains the uniqueness that makes each of us special. The processes are general and need to be understood; the way they play out on the individual level, however, is different for each of us. The complexity of this interplay, and the degree to which it is also influenced by biology and culture—is what makes the task so interesting. And this is also why the understanding of alcohol and drug involvement is so challenging: It is intimately connected to an understanding of what makes us distinctly human.

References

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2. The Schuckit (1987) review cites Schuckit and Dunby (1982) and Zeiner et al. (1984) as sources for these effects.

3. See Thomas and Chess (1977). Thomas, A. & Chess, S. Temperament and Development. (New York: Brunner/ Mazel).

4. See Tartar and Vanyukov (1994) for a much more detailed description of the interplay of these relationships. Tartar, R.E. and Vanyukov, M.M. Stepwide developmental model of alcoholism etiology. In Zucker, R. A., J. Howard, and G.M. Boyd, eds. (1994). Development of alcohol problems: Exploring the biopsychosocial matrix of risk. (Rockville, Maryland: National Institute on Alcohol Abuse and Alcoholism).

5. Murray and Kluckhohn used the term here in its generic sense, as reflective of all humankind, of both genders.

6. Murray, H.A. & Kluckhohn, C. (1953). Outline for a conception of personality. In Kluckhohn, C. and H.A. Murray, eds. Personality in Nature, Society and Culture (2nd ed., pp. 3-32) (New York: Alfred A. Knopf).