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# Subcultural evolution and illicit drug use\*

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# **Abstract**

This article articulates a subcultural basis to the evolving popularity for different illicit drugs primarily based on empirical research in the United States, especially among inner-city populations. From this perspective, drug use emerges from a dialectic between drug subcultures with individual identity development. The prevailing culture and subcultures affect drugs' popularity by imparting significance to their use. Innovations, historical events, and individual choices can cause subcultures to emerge and change over time. This subcultural view provides insight into the widespread use of licit drug, the dynamics of drug eras (or epidemics), the formation of drug generations, and the apparent "gateway" phenomenon.

### **Keywords**

Subculture; diffusion; life course; epidemic; era; generation; gateway

# Introduction

Drug use is often much more than the ingestion of a preparation in order to experience a physical or psychological reaction. Social activities, use by friends, popular images, references in music, myths, availability, potential legal consequences, and youthful rebellion can impart a greater significance to the behavior. In this manner, drug use occurs within a cultural context. Our theory of subcultural evolution and drug use seeks to explicate central aspects to the nature of this relationship.

This theory is primarily based on our extensive empirical research on heroin, crack, and marijuana use in the U.S., especially among inner-city populations. Our theory has guided and grown out of our varied drug-related research activities involving the interpretation of epidemiological trend data, extended ethnographic observation, and directed reading of perspectives from numerous disciplines. We have and continue to use our theory to provide a concise framework that integrates extensive information; to communicate our evolving understanding of many of the most important features of drug use in context; to identify potentially important understudied topics for further research; and to formulate public policy recommendations.

Our reading of the wider literature suggests that many aspects of the theory can pertain to illicit drug use among a range of socio-economic groups and among populations outside the U.S. as well as to licit substance use and a wide range of human behaviors unrelated to drug use. However, at this time we limit our theorizing to illicit drug use and associated cultural

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elements and processes, primarily in the U.S., and with a special emphasis on inner-city populations. Even within these boundaries, we recognize that our theory is incomplete and may prove inadequate in some details when applied to some persons, some drugs, and some social contexts. These limitations result from the complexity of the human experience, the numerous factors affecting drug use (Abadinsky, 1993; Lowinson, Ruiz, Millman & Langrod, 1997; Petraitis, Flay & Miller, 1995; Zinberg, 1984), the evolving nature of knowledge (Kuhn, 1962), and that our place in the prevailing culture subjectively colors our understanding of the world as researchers (Jessor, Colby & Shweder, 1996; Smith & Deemer, 2000). The remainder of this article examines the social processes that facilitate the evolution of drug subcultures and employs our theory to provide insight into drug eras, drug generations, and the gateway phenomenon.

# A theory of subcultural evolution and drug use

Drug use emerges from a dialectic of the prevailing culture (and especially drug subcultures) with individual identity development. Use of a drug is clearly an individual's decision but it is the prevailing drug subcultures and each person's place relative to them that impart a greater significance to the activity. Conversely, individual decisions to adopt, adapt or reject aspects of the prevailing drug subcultures cause the subcultures to evolve as well as lead to the emergence of new ones.

# The structure of culture

Different groups across disciplines and over time have operationalized culture in assorted ways to organize their study of human behavior in context (Schafer, 1998; Spillman, 2002). These conceptualizations range from the overarching to the minimalist. For our purposes, both perspectives are useful. In 1871, Sir Edward Burnett Tylor, an anthropologist, provided a concise statement of the monumental and comprehensive nature to culture that now represents a classical formulation (cited in Schafer, 1998, p. 22):

Culture or civilization, taken in its wide ethnographic sense, is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society.

According to this perspective, ideas, artifacts, behaviors and persons are intimately bound together within a single social structure, the culture. Schafer (1998) noted that a culture holds a shared cosmology, a worldview, a myth of origin, and visions of how things are supposed to be and why. Accordingly, internal and external forces motivate members to conform to various conduct norms (often unwritten and even unspoken) that undergird their personality system, that guide social interactions, and that allow participants to function within a social context as if on automatic pilot (also see Hechter & Opp, 2001; Johnson, 1973, 1980; Sellin, 1938; Wolfgang & Ferracuti, 1982).

The classical perspective identifies a larger gestalt to social context that compels individuals to engage in various behaviors and attach significance to them. On the negative side, this older viewpoint clearly downplays diversity within a society and the potential of personal autonomy. A postmodern sensibility emphasizes the multiplicity of prevailing cultural frameworks, the interacting of themes, and the centrality of individual agency. Postmodern researchers contend the need for this new perspective derives from the changing structure of our socio-political experience due to global business, international communication, transnational social movements, and especially the decline in the centrality of the nation state (Allan & Turner, 2000; Beck, 2000; Green, 2000). Beck's (2000) "reflexive cosmopolitization" posited that individuals build their identities based on multiple affiliations leading to a broad intermingling of ideas and behaviors without reference to national borders. Accordingly, the postmodern outlook holds a more fractionated and

tenuous view for the influence of various cultural elements. Consistent with this outlook, Swidler (1986) viewed culture as a "toolkit" of habits, skills, and styles from which actors construct their strategy of actions.

We contend that the conditions of postmodernity apply less well to American inner-city residents than to wealthier populations. Many poor families have been trapped in the inner-city due to historical circumstances; insidious prejudice; and a lack of the human, social and cultural capital necessary to advance economically through the conventional labor market (Harrell & Peterson, 1992; Massey & Denton, 1993; Wilson, 1987). We maintain that the prevailing culture can loom large within these socially isolated conditions, in a manner suggested by the classical definition for culture. Moreover, widespread frustration, despair, need for income, and pressure to belong to the street culture can lead inner-city residents to use and sell illicit drugs (Anderson, 1999; Bourgois, 1995; Johnson, Williams, Dei & Sanabria, 1990).

On the other hand, inner-city life has not remained culturally stable. There have been massive popular culture shifts since the 1960s in the drug of choice among American innercity populations from heroin (especially when injected), to crack, and then blunts, inexpensive cigars in which the tobacco filler has been replaced with marijuana. Hence, our theory of subcultural evolution and illicit drug use incorporates some of the more flexible aspects from postmodern perspectives on culture along with perspectives from the study of the life course (Mortimer & Shanahan, 2003), symbolic interactionism (Blumer, 1969; Stryker, 1990), social learning theory (Akers, 1998; Bandura, 1977), and diffusion of innovation (Rogers, 1995) as well as other related theories.

# **Drug subcultures**

For our purposes, we view culture as simultaneously encompassing multiple subcultures (or toolkits) that include constellations of connected values, symbols, norms, and behavior patterns. These subcultures can be based around drug use, ethnicity, religion, region, or a variety of other affiliations. We operationalize the term *drug subculture* as an inter-related cluster of cultural elements associated with the consumption of an illicit drug in social settings. For example, youths may insist on smoking their marijuana in a blunt, drink 40-ounce bottles of malt liquor, listen to rap music, wear baggy pants, define marijuana as not a drug, and socialize mainly with other blunt smokers.

We do not conceptualize drug subcultures as necessarily dominating individuals' lives, although some drug subcultures certainly may dominate some persons' lives (for example, see Johnson et al., 1985; Ratner, 1992). Drug subcultures differ regarding the extent to which they represent an occasional leisure activity *versus* a lifestyle, an amusement *versus* a worldview, and an interest occasionally shared with others *versus* a group affiliation demanding limited association with nonmembers. Individuals will differ as to the extent to which they become involved with a drug subculture. Furthermore, individuals may act completely differently in different social contexts. Anderson (1999) described how many inner-city youths code-switch or shift their behaviors depending on whether an occasion calls for street (and drug using) or decent subcultural behavior. Individuals may engage in more than one drug subculture. Individuals may end their involvement with a drug subculture. Drug subcultures can differ across locations and across the groups that instantiate them. Moreover, drug subcultures can evolve or even disappear over time.

Ecological studies have similarly observed this type of subcultural relativism and multiple affiliations in secondary schools. Brown, Dolcini and Leventhal (1997) found that youths tended to organize themselves into "crowds," to which they gave labels such as the populars, the brains, the nerds, the jocks, and the druggies. Youths easily identified crowd members

by their appearance, attitude, and behavior patterns. In one sense, crowd membership appeared to loom large in individuals' lives. Crowds often insisted that members conform to group substance use norms. Brown et al. (1997, p. 183) concluded that:

[A]sking some teenagers to give up smoking is tantamount to asking them to give up their identity (if smoking is the hallmark of the druggie crowd) or their credibility in a crowd that represents the only peer support system they have.

However, youths in these studies still displayed much personal autonomy. Quite often youths chose a crowd based on their desire to engage in the group's norms. So, a crowd's cultural characteristics often reflected the interests and identity of the individuals as opposed to the other way around. Moreover, crowd membership was ultimately voluntary. Not all youths were involved with a crowd; and some youths were positioned as partially belonging to two or more crowds.

# A culture-identity coproduction dialectic

Our theory holds that culture and individual identity engage in a dialectic of coproduction. The prevailing drug subcultures and individuals' social position relative to them define the range of drugs readily available, the symbolic significance of their use, how use can lead to various affiliations, and the social consequences for both use or non-use (also see Hammersley, Jenkins & Reid, 2001). In this manner, culture and identity are constructed from the same source material. However, culture and drug subcultures depend on individuals as much as individuals base their experiences within the prevailing culture.

People are not passive victims of culture. They have agency. Each person has three basic choices regarding their reaction to a drug subculture: adopt, adapt or reject (also see Blumer, 1969; Rogers, 1995; Schafer, 1998). We contend this process represents a symbolic interaction that often occurs subliminally in the course of daily activity as described by Blumer (1969, p. 4):

[S]ymbolic interactionism sees meanings as social products as creations that are formed in and through the defining activities of people as they interact. ...The actor selects, checks, suspends, regroups, and transforms the meanings in the light of the situation in which he is placed and the direction of his action. Accordingly, interpretation should not be regarded as a mere automatic application of established meanings but as a formative process in which meanings are used and revised as instruments for the guidance and formation of action.

Thus, the future of any drug subculture and its place within the larger culture depends on the extent that people continually adopt it and perpetuate its conduct norms. Drug subcultures can die out as people reject them. New subcultures emerge through the process of persons adapting existing cultural elements to their circumstances. Hence, the prevailing drug subcultures can vary substantially over time, across locations, and with social position (also see Schulenberg, Maggs & Hurrelmann, 1997).

# Identity development and drug use

Our theory incorporates aspects of the social learning (Akers, 1998; Bandura, 1977; Oetting & Donnermeyer, 1998) and life course (Mortimer & Shanahan, 2003) perspectives in viewing identity development as following an imitative and adaptive process (often un-self-consciously) that differs at successive ages and that occurs within a socio-historical context. At the earliest ages, home and family represent the primary influence in young children's lives. Within this context, parents' and other older household members' behaviors define the standards that children adopt, adapt or reject. Accordingly, children that grow up among

illicit drug users may choose to become drug users, perhaps even at an early age (also see Dunlap, Golub, Johnson & Wesley, 2002).

In adolescence, a wider range of influences (some that parents and conventional society may disapprove of) come to affect identity development including school, peers, mass media, and broader trends in clothes and music. Prior literature has found that adolescence represents the peak period for initiation of alcohol, tobacco and illicit drug use (Chen & Kandel, 1995; Golub, Johnson & Labouvie, 2000; Johnston, 1991). Interestingly, the literature also documented that very few persons first get involved with illicit drug use after their midtwenties.

Drug use tends to change over the life course. Young adults often conceive of illicit drug use as incompatible with the cultural expectations associated with their new social roles as employees, adult members of the community, and parents. Prior research found many reduce or eliminate their use of illicit drugs with time, with maturation (Sifaneck & Kaplan, 1995; Winick, 1963), and especially as they assume conventional adult roles such as marriage and parenthood (Bachman, Wadsworth, O'Malley, Johnston & Schulenberg, 1997; Chen & Kandel, 1995; Golub, Johnson, Dunlap & Sifaneck, 2004).

However, desistence depends upon the drug involved and the subpopulation under consideration. Persons often continue use of licit substances (alcohol, caffeine, and tobacco) throughout much of adulthood. Some also continue illicit drug use well into adulthood – especially adults with relatively limited attachment to conventional societal roles. Urinalysis tests consistently identified the majority of arrestees across the U.S. as recent illicit drug users, regardless of their age (Golub & Johnson, 1999; NIJ, 2003). This persistence may result from physical dependence, a commitment to a subcultural identity, barriers to conventional roles, or a combination of factors.

# **Drug eras**

Much prior literature has suggested that the popularity of some drugs rapidly rises and then falls, constituting what is often referred to as a "drug epidemic" (Becker, 1963, 1967; Golub & Johnson, 1999; Hamid, 1992; Hunt & Chambers, 1976; Johnston, 1991; Musto 1987, 1993). Unfortunately, journalists and politicians commonly abuse the term drug epidemic to arouse concern and serve political agendas (see Hartman & Golub, 1999; Orcutt & Turner, 1993; Reinarman & Levine, 1997). The epidemic metaphor suggests drug use is a disease, drug use causes great suffering, drug users infect others through social contact, and that consequently drug users must be quarantined. This medicalized perspective takes an outsider's view, holds an overwhelmingly negative connotation, and suggests the root problem of a drug epidemic inheres in the pharmacological properties of the drug itself.

We contend that drug eras represent a social and not a pharmacological phenomenon. Zinberg (1984) described how three exhaustive classes of factors influence a drug use experience: drug, set (personal disposition as well as genetic factors) and setting (context and culture). Drug and set would seem to have a very limited role, if any, in explaining the rise and fall of different drugs in the United States since 1960. During this time, drug and set have been relatively constant. In particular, the various drug eras have mostly involved illicit drugs that have been known for years. Crack was a modest exception. It represented an innovative technique for packaging, selling and consuming a previously available drug, namely cocaine. Regarding set, the genetic and ethnic composition of the U.S. population has also been relatively stable, even allowing for continual migration. Hence, a panoramic view of the data suggests that rapid changes in drug use prevalence are primarily a sociocultural or setting phenomenon. Accordingly, we prefer the term drug era to drug epidemic because it emphasizes the cultural aspect of the phenomena; it places drug use

within a larger gestalt; it suggests that mass media in addition to personal contact can play a central role in the diffusion and acceptance of drug use; and it holds a relatively neutral connotation, eras can be good or bad and typically have both positive and negative qualities.

Based on empirical and theoretical research, we conceptualize four distinct phases to drug eras: incubation, expansion, plateau, and decline. This framework has been previously used to analyze the Heroin Injection Era prevailing in the 1960s and early 1970s (Johnson & Golub, 2002), the Crack Era of the late 1980s and early 1990s (Golub & Johnson, 1997), the Marijuana/Blunts Era of the 1990s (Golub & Johnson, 2001a), and a modest rise in use of hallucinogens such as MDMA in the 1990s (Golub, Johnson, Sifaneck, Chesluk & Parker, 2001).

### Incubation phase

A drug era typically starts among a highly limited subpopulation participating in a specific social context. The Heroin Injection Era grew out of the jazz music scene (Jonnes, 2002), the Crack Era started with inner-city drug dealers at after-hours clubs (Hamid, 1992), and the Marijuana/Blunts Era was based in the hip-hop movement (Sifaneck, Kaplan, Dunlap & Johnson, 2003).

### **Expansion phase**

Sometimes, the pioneering drug users successfully introduce the practice to wider subgroups of users and to the broader population. In a very broad review of the literature, Rogers (1995) identified that when ideas spread they tend to spread with increasing rapidity whether it involves a new consumer product, fashion, teaching method, or agricultural technique. Mathematically, many aspects of these "diffusion of innovation" processes are analogous to disease epidemics. The primary difference between social diffusions and disease epidemics is what is being spread – an idea or behavior as opposed to a bacteria or virus. Persons have agency regarding whether they adopt a behavior such as use of a new drug. Consequently, individual susceptibility to use varies greatly according to friendship networks, social position, and personal identity.

#### Plateau phase

Eventually, everyone most at risk of the new drug practice (typically users of other illicit drugs) has either initiated use or at least had the opportunity to do so. For a time, widespread use prevails. During this period, youths first coming of age typically initiate use of the currently popular drug(s), if any. These users form the core of a drug generation for whom the drug has particularly symbolic significance based in their social activities and relationships.

### Decline phase

Eventually, the use of an illicit drug tends to go out of favor. This leads to a gradual decline phase of a drug era. We conceptualize that new clusters of conduct norms emerge that hold that the use of a drug is bad or old-fashioned. The subsequent diffusion of innovation process then competes with the prevailing pro-use norms. Furst, Johnson, Dunlap and Curtis (1999) found that during the decline phase of the Crack Era in inner-city New York "crackhead" became a dirty word and that youths avoided peers that they suspected of crack use. During the decline phase, a decreasing proportion of youths coming of age develop into users. However, the overall use of the drug endures for many years as some members of a drug generation continue their habits.

# **Drug generations**

Prior life course research has documented that major events including wars, depression, and technological change can define circumstances, shape attitudes, and effect behaviors for the remainder of one's life (see Alwin & McCammon, 2003; Elder, 1999; Newman, 1996). Such shared experiences often distinguish a cohort from its predecessors leading to the emergence of generational identities. In an extensive review, Alwin and McCammon (2003) reported that researchers have employed this approach to explain a wide range of social changes including among others liberal *versus* conservative outlooks, racial prejudice, church attendance, sex roles beliefs, pre-marital co-habitation, and watching television. This literature indicated that the impact of a historical event can depend upon one's social position, life circumstances and personal decisions. However, the most central factor was often age at the time an event occurred. Youth coming of age during a historical period can form a generation readily distinguished by their behaviors and attitudes from persons that reached adulthood before the defining event and from persons born subsequently that did not fully experience the event or were more influenced by subsequent events.

We maintain that major drug eras potentially impact lives in a similar manner, especially those that become users. Accordingly, we define a drug generation as the birth years most affected by a drug era. We have found that drug eras most affect the persons reaching adolescence (roughly from age 11 to 25) during the plateau phase (see especially Golub & Johnson, 1999). In this manner, birth year represents a powerful risk factor or more accurately a proxy indicator of changes in prevailing social conditions that increase risk for use of a trendy drug. Our work has distinguished three successive drug generations in innercity New York (Golub & Johnson, 1999): the heroin injection generation born primarily 1945–54, the crack generation born primarily 1955–69, and the marijuana/blunts generation born since 1970. Many other locations in the U.S. experienced similar drug use trends, although the timing and impact varied (Golub & Johnson, 1997, 2001a).

To illustrate the formation of a drug generation, we describe the experiences of the crack generation in inner-city New York (see Golub & Johnson, 1997, 1999). During the late 1980s, youths could choose to smoke crack or avoid its use. Not everyone born during 1955–69 became a crack user, but many did, especially in inner-city New York. Persons coming of age during the 1970s did not have the opportunity to use crack in their youth. As adults during the 1980s, crack smoking was not particularly appealing, except to the subpopulation of adults that were already habitual users of heroin or powder cocaine (see Golub & Johnson, 1994a, 1996). Persons coming of age since the mid-1990s overwhelmingly chose not to use crack and supported each others decisions to not use.

The succession of drug eras brought about distinct subcultural clusters of other values, norms, behaviors, and symbols that accompanied specific drug use (see Johnson, Golub & Dunlap, 2000). During the Heroin Injection Era, users maintained that heroin provided the greatest high. Speedballs (cocaine mixed with heroin) were a great way to go "fast then slow." Many users eventually organized their daily lives around their habit: performing various hustles, nondrug crimes, a variety of drug sales/distribution roles, chasing the best bag of heroin, locating a safe place to inject, conning others into sharing drugs or needles, avoiding police, and finding free food, shelter, and clothing. For many, "taking care of business" (their heroin habit) provided them with a sense of purpose and meaning they could not achieve in conventional society (also see Johnson et al., 1985; Preble & Casey, 1969).

During the Crack Era, crack users attached symbolic importance to smoking cocaine freebase (labeled as crack or rock), which became enshrined in a new vocabulary of expectations (see Johnson, Golub & Fagan, 1995; Johnson et al., 1990; Waldorf, Reinarman

& Murphy, 1991; Williams, 1992). Crack users maintained that smoking crack yields the greatest high. Crack users went on runs or missions, jargon derived from Star Trek, a popular television show and series of movies. These runs involved continuously hustling money, obtaining crack, and using it without sleep or much food, until extremely exhausted. Users would spend all their money on crack. Purchase small amounts of crack as soon as money was available. Trade labor or skills (including sex) for small amounts of crack. Maintain that selling crack can provide "crazy money." Spend time mainly with other crack users. Abandon friends and family for crack use. Place the purchase and use of crack before all other needs such as food, shelter, clothes, and family. Crack sellers were active on virtually every block in inner-city New York and at some locations in many middle-class and suburban neighborhoods as well. Potential buyers often had to ward off simultaneous offers from several sellers (also see Jacobs, 1999). Aggressive sellers often approached total strangers, including those in cars. Some blocks in inner-city New York became crack street markets, with over 100 crack sellers and even more crack buyers simultaneously active. Such markets were often open "24/7" – 24 hours a day, 7 days a week – to serve those engaging in extended binges of use. Sellers frequently used violence to secure their territory, settle debts, steal from each other, punish disobedient operatives, or to just enhance their reputation as a "crazy" person that would quickly resort to violence if anyone tried to cross him or even "dissed" (disrespected) him (also see Bourgois, 1995; Fagan & Chin, 1990; Goldstein, Brownstein, Ryan & Bellucci, 1997; Jacobs, 1999).

In the 1990s, youths reacted against the violence, personal devastation, and legal consequences that befell heroin and crack users (see Johnson et al., 2000). They had directly observed the impact of these drugs on older inner-city residents. Blunts became their drug of choice. They maintained that crackheads are shit! Heroin injection causes AIDS. Blunt users would sit for hours sharing blunts, beer, and each other's company. Many analysts suggested that the end of the Crack Era along with the rise in marijuana use was a major contributor to the decline in violent crime observed across the country during the 1990s (Blumstein & Wallman, 2000).

Drug eras tend to overlap as some members of a drug generation may continue to use their preferred drug throughout adulthood, despite changing times. There are many possible reasons for this subcultural inertia. Some users develop a dependence. For some, potential desistance represents a radical transformation to their lifestyle, their friendships and their identity – a change they may be unwilling or unable to achieve.

# The gateway phenomenon

Much research (mostly from general population surveys) has suggested people typically use alcohol or tobacco, and then marijuana, prior to any potential use of other illicit drugs like cocaine powder, crack, and heroin (for reviews of this extensive literature see Golub & Johnson, 2002; and Kandel, 2002). Persons that do not use substances associated with one stage rarely go on to use those associated with a higher stage. Consequently, many refer to alcohol, tobacco, and marijuana as "gateway drugs." However, this nomenclature may be misleading. It suggests that use of alcohol, tobacco and marijuana predisposes youths to use of other potentially more dangerous illicit drugs. Indeed, some scholars explicitly suggest the link could be biochemical (Nash, 1997).

This pharmacological perspective stands in strong contrast to much of the original research that documented the gateway phenomena. Yamaguchi and Kandel (1984, p. 671) carefully contextualized their finding of stages of drug use as part of more complex developmental and cultural processes:

The existence of stages of progression, however, does not necessarily imply causal linkages among different drugs since the observed sequences could simply reflect the association of each class of drugs with different ages of initiation and/or individual attributes rather than the specific effect of the use of one class of drug on the use of another. ...[U]se of a drug at a particular stage does not invariably lead to the use of other drugs higher up in the sequence. Many youths stop at a particular stage and do not progress further. In addition, the particular sequence of progression that has been identified may be determined partly by secular trends.

Indeed, our theory of subcultural evolution suggests the gateway sequence may be a cultural artifact. Children may start with alcohol and tobacco because use of these licit substances is modeled in the home. As they progress through adolescence, their first illicit drug might be marijuana, because its use is the most widespread among their peers, and because it is broadly perceived as not particularly harmful (Bachman, Johnston & O'Malley, 1998).

The universality of the gateway sequence might therefore be limited to the extent that cultures differ across locations and evolve over time. In support of this idea, several studies of hard drug users from inner-city New York found that a substantial percentage of them had not followed the gateway sequence (Golub & Johnson, 1994b, 2002; Mackesy-Amiti, Fendrich & Goldstein, 1997). Johnson and Gerstein (1997) found that use of illicit drugs was virtually nonexistent among Americans born before World War II. Golub and Johnson (2001b) found that the risks of progression through the gateway sequence changed dramatically over time. In the U.S., the gateway sequence emerged with the baby boom generation and declined afterward. Golub and Johnson (2001a) documented that despite increased marijuana use in the 1990s, use of hard drugs did not increase.

### **Conclusions**

Our theory of subcultural evolution and illicit drug use provides a powerful framework for understanding the prevailing drug use trends and their socio-cultural significance. This theory has served in our empirical study of illicit drug use in the U.S. since World War II, especially among inner-city populations. The development of this theory has followed a hermeneutic process over the course of our research careers guiding empirical inquiry, drawing on observations, and always seeking to incorporate insights from other research and theories for enrichment. This frame has helped explain the dynamics of several major phenomena such as drug eras (or epidemics), drug generations, and the gateway phenomenon. It has also proven useful to the ethnographic study of the lived experience providing insight into intergenerational transmission of behaviors, the interconnection between behaviors, and the subcultural significance of human activity.

We view our theory as both incomplete and limited. The theory does not specify the nature of trigger events that lead to the expansion or decline of a drug era. Indeed, it may not be possible to accurately identify such conditions, given the multiplicity of possible factors that can effect subcultural evolution. There are various other limitations. The theory says little about the influences of drug pharmacology and set on a person's drug use experiences. The theory does not specify risk and protective factors associated with the etiology of drug use, with the strong exception of birth year, which is often overlooked in other conceptualizations. The theory does not examine the short- and long-term consequences of use. The theory does not examine how and why social structural impediments render disadvantaged persons at greater risk of drug abuse problems, although not necessarily greater risk of use. By not describing these dynamics, the theory is compatible with other theories that do address these aspects of the drug use experience.

Our subcultural perspective on illicit drug use blends aspects of both classical writing on culture as a comprehensive social system and more recent postmodern writing that emphasizes personal agency along with the flow of ideas without borders. We speculate that the quality of the fit, between this theory and the data we analyzed, owes to an appropriate mix of cultural conformance and plasticity within the populations we have studied. Within inner-city communities, there have been strong peer expectations to conform to the prevailing standards for dress, musical taste, interpersonal behavior, and drug use. At the same time, these standards have been shifting over time. We suspect that the evolutionary part to our theory would be completely unnecessary to the study of substance use within traditional societies with a persistent dominant culture. On the other side, we suspect the geographically-bound diffusion part to our theory would be less relevant to the study of technologically advanced, wealthier populations with greater access to worldwide communication and a less pronounced affiliation with a single cultural community.

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### References

Abadinsky, H. Drug abuse: An introduction. Chicago: Nelson-Hall; 1993.

Akers, RL. Social learning and social structure: A general theory of crime and deviance. Boston: Northeastern; 1998.

Allan K, Turner JH. A formalization of postmodern theory. Sociological Perspectives. 2000; 43:363–385.

Alwin, DF.; McCammon, RJ. Generations, cohorts and social change. In: Mortimer, JT.; Shanahan, MJ., editors. Handbook of the life course. New York: Kluwer; 2003. p. 23-49.

Anderson, E. Code of the street: Decency, violence, and the moral life of the inner city. New York: Norton; 1999.

Bachman JG, Johnston LD, O'Malley PM. Explaining recent increases in students' marijuana use: Impacts of perceived risks and disapproval, 1976 through 1996. American Journal of Public Health. 1998; 88:887–892. [PubMed: 9618614]

Bachman, JG.; Wadsworth, KN.; O'Malley, PM.; Johnston, LD.; Schulenberg, JE. Smoking, drinking and drug use in young adulthood: The impacts of new freedoms and new responsibilities. Mahwah, NJ: Lawrence Erlbaum; 1997.

Bandura, A. Social learning theory. Englewood Cliffs, NJ: Prentice Hall; 1977.

Beck U. The cosmopolitan perspective: Sociology of the second age of modernity. British Journal of Sociology. 2000; 51:79–105.

Becker, HS. Outsiders: Studies in the sociology of deviance. New York: Free Press; 1963.

Becker HS. History, culture, and subjective experience: An exploration of the social bases of drug-induced experience. Journal of Health and Social Behavior. 1967; 8:163–176. [PubMed: 6073200]

Blumer, H. Symbolic interactionism: Perspective and method. Berkeley, California: 1969.

Blumstein, A.; Wallman, J., editors. The crime drop in America. New York: Cambridge; 2000.

Bourgois, P. In search of respect: Selling crack in El Barrio. New York: Cambridge; 1995.

Brown, BB.; Dolcini, MD.; Leventhal, A. Transformations in peer relationships at adolescence: Implications for health-related behavior. In: Schulenberg, J.; Maggs, JL.; Hurrelmann, K., editors. Health risks and developmental transitions during adolescence. Cambridge, UK: Cambridge; 1997. p. 161-189.

Chen K, Kandel DB. The natural history of drug use from adolescence to the mid-thirties in a general population sample. American Journal of Public Health. 1995; 85:41–47. [PubMed: 7832260]

Dunlap E, Golub A, Johnson BD, Wesley D. Intergenerational transmission of conduct norms for drugs, sexual exploitation and violence: A case study. British Journal of Criminology. 2002; 42:1–20.

- Elder, GH. Children of the great depression: Social change in life experience. 25. Boulder, CO: Westview; 1999.
- Fagan, JA.; Chin, K. Violence as regulation and social control in the distribution of crack. In: De La Rosa, M.; Lambert, E.; Gropper, B., editors. Drugs and violence, NIDA Research Monograph. Vol. 103. Rockville, MD: National Institute on Drug Abuse; 1990. p. 8-43.
- Furst RT, Johnson BD, Dunlap E, Curtis R. The stigmatized image of the 'crack head:' A sociocultural exploration of a barrier to cocaine smoking among a cohort of youth in New York City. Deviant Behavior. 1999; 20:153–181.
- Goldstein, PJ.; Brownstein, HH.; Ryan, PJ.; Bellucci, PA. Crack and homicide in New York City: A case study in the epidemiology of violence. In: Reinarman, C.; Levine, HG., editors. Crack in America: Demon drugs and social justice. Berkeley, California: 1997. p. 113-130.
- Golub A, Johnson BD. Cohort differences in drug use pathways to crack among current crack abusers in New York City. Criminal Justice and Behavior. 1994a; 21:403–422.
- Golub A, Johnson BD. The shifting importance of alcohol and marijuana as gateway substances among serious drug abusers. Journal of Studies on Alcohol. 1994b; 55:607–614. [PubMed: 7990471]
- Golub A, Johnson BD. The crack epidemic: Empirical findings support a hypothesized diffusion of innovation process. Socio-Economic Planning Sciences. 1996; 30:221–231.
- Golub, A.; Johnson, BD. Research in Brief, NCJ 165707. Washington, DC: National Institute of Justice; 1997. Crack's decline: Some surprises across U.S. cities.
- Golub A, Johnson BD. Cohort changes in illegal drug use among arrestees in Manhattan: From the heroin injection generation to the blunts generation. Substance Use and Misuse. 1999; 34:1733–1763. [PubMed: 10540971]
- Golub, A.; Johnson, BD. Research in Brief, NCJ 187490. Washington, DC: National Institute of Justice; 2001a. The rise of marijuana as the drug of choice among youthful arrestees.
- Golub A, Johnson BD. Variation in youthful risk of progression from alcohol/tobacco to marijuana and hard drugs across generations. American Journal of Public Health. 2001b; 91:225–232. [PubMed: 11211630]
- Golub A, Johnson BD. The misuse of the "gateway theory" in U.S. policy on drug abuse control: A secondary analysis of the muddled deduction. International Journal of Drug Policy. 2002; 13:5–19.
- Golub A, Johnson BD, Dunlap E, Sifaneck S. Projecting and monitoring the life course of the marijuana/blunts generation. Journal of Drug Issues. 2004; 34:357–384.
- Golub A, Johnson BD, Labouvie E. On correcting biases in self-reports of age at first substance use with repeated cross-section analysis. Journal of Quantitative Criminology. 2000; 16:45–68. [PubMed: 21544259]
- Golub A, Johnson BD, Sifaneck S, Chesluk B, Parker H. Is the U.S. experiencing an incipient epidemic of hallucinogen use? Substance Use and Misuse. 2001; 36:1699–1729. [PubMed: 11758819]
- Green MD. The end of identity? The implications of postmodernity for political identification. Nationalism and Ethnic Politics. 2000; 6:68–90.
- Hamid A. The developmental cycle of a drug epidemic: The cocaine smoking epidemic of 1981–1991. Journal of Psychoactive Drugs. 1992; 24:337–348. [PubMed: 1491283]
- Hammersley R, Jenkins R, Reid M. Cannabis use and social identity. Addiction Research and Theory. 2001; 9:133–150.
- Harrell, A.; Peterson, PE., editors. Drugs, crime, and social isolation: Barriers to urban opportunity. Washington, DC: Urban Institute; 1992.
- Hartman D, Golub AL. The social construction of the crack epidemic in the print media. Journal of Psychoactive Drugs. 1999; 31:423–433. [PubMed: 10681109]
- Hechter, M.; Opp, KD., editors. Social norms. New York: Russell Sage; 2001.

Hunt, LG.; Chambers, CD. The heroin epidemics: A study of heroin use in the US, part 2, 1965–75. Holliswood, NY: Spectrum; 1976.

- Jacobs, BA. Dealing crack: The social world of streetcorner selling. Boston: Northeastern; 1999.
- Jessor, R.; Colby, A.; Shweder, RA., editors. Ethnography and human development: Context and meaning in social inquiry. Chicago: Chicago; 1996.
- Johnson, BD. Marihuana users and drug subcultures. New York: Wiley; 1973.
- Johnson, BD. Better theories and methodologies then more data. In: Maloff, DR.; Levinson, PK., editors. Issues in controlled substance use. Washington, DC: National Academy of Sciences; 1980. p. 70-82.
- Johnson, BD.; Goldstein, PJ.; Preble, E.; Schmeidler, J.; Lipton, DS.; Spunt, B., et al. Taking care of business: The economics of crime by heroin abusers. Lexington, MA: Lexington; 1985.
- Johnson, BD.; Golub, A.; Dunlap, E. The rise and decline of hard drugs, drug markets and violence in New York City. In: Blumstein, A.; Wallman, J., editors. The crime drop in America. New York: Cambridge; 2000. p. 164-206.
- Johnson BD, Golub A, Fagan J. Careers in crack, drug use, drug distribution and nondrug criminality. Crime and Delinquency. 1995; 41:275–295.
- Johnson, BD.; Golub, A. Generational trends in heroin use and injection among arrestees in New York City. In: Musto, D., editor. One hundred years of heroin. Westport, CT: Auburn House; 2002. p. 91-128.
- Johnson, BD.; Williams, T.; Dei, K.; Sanabria, H. Drug abuse and the inner city: Impact on hard drug users and the community. In: Tonry, M.; Wilson, JQ., editors. Drugs and crime, crime and justice series. Vol. 13. Chicago: Chicago; 1990. p. 9-67.
- Johnson RA, Gerstein DR. Initiation of use of alcohol, cigarettes, marijuana, cocaine and other drugs in U.S. birth cohorts since 1919. American Journal of Public Health. 1997; 88:27–33. [PubMed: 9584029]
- Johnston, LD. Toward a theory of drug epidemics. In: Donohew, DH.; Sypher, H.; Bukoski, W., editors. Persuasive communication and drug abuse prevention. Hillsdale, NJ: Lawrence Erlbaum; 1991. p. 93-132.
- Jonnes, J. Hip to be high: Heroin and popular culture in the Twentieth Century. In: Musto, DF., editor. One hundred years of heroin. Westport, CT: Auburn House; 2002. p. 227-236.
- Kandel, DB., editor. Stages and pathways of drug involvement. New York: Cambridge; 2002.
- Kuhn, TS. The structure of scientific revolutions. Chicago: Chicago; 1962.
- Lowinson, JH.; Ruiz, P.; Millman, RB.; Langrod, JG. Substance abuse: A comprehensive textbook. 3. Baltimore: Williams & Wilkins; 1997.
- Mackesy-Amiti ME, Fendrich M, Goldstein PJ. Sequence of drug use among serious drug users: Typical vs. atypical progression. Drug and Alcohol Dependence. 1997; 45:185–196. [PubMed: 9179520]
- Massey, DS.; Denton, DA. American apartheid: Segregation and the making of the underclass. Cambridge, MA: Harvard; 1993.
- Mortimer, JT.; Shanahan, MJ., editors. Handbook of the life course. New York: Kluwer; 2003.
- Musto, DF. The American disease: Origins of narcotic control. New York: Oxford; 1987.
- Musto, DF. The rise and fall of epidemics: Learning from history. In: Edwards, G.; Strang, J.; Jaffe, JH., editors. Drugs, alcohol, and tobacco: Making the science and policy connections. New York: Oxford; 1993.
- Nash JM. Addicted. Time. 1997 May 5.
- National Institute of Justice (NIJ). 2000 Arrestee Drug Abuse Monitoring: Annual Report. NCJ 193013. Washington, DC: National Institute of Justice; 2003.
- Newman, K. Ethnography, biography, and cultural history: Generational paradigms in human development. In: Jessor, R.; Colby, A.; Shweder, RA., editors. Ethnography and human development: Context and meaning in social inquiry. Chicago: Chicago; 1996. p. 371-393.
- Orcutt JD, Turner JB. Shocking numbers and graphic accounts: Quantified images of drug problems in the print media. Social Problems. 1993; 40:190–206.

Oetting ER, Donnermeyer JF. Primary socialization theory: The etiology of drug use and deviance. I. Substance Use and Misuse. 1998; 33:995–1026. [PubMed: 9548633]

- Petraitis J, Flay BR, Miller TQ. Reviewing theories of adolescent substance use: Organizing pieces in the puzzle. Psychological Bulletin. 1995; 117:67–86. [PubMed: 7870864]
- Preble EJ, Casey JJ. Taking care of business The heroin user's life on the street. International Journal of Addictions. 1969; 4:1–24.
- Ratner, M., editor. Crack pipe as pimp: An eight city study of the sex-for-crack phenomena. New York: Lexington; 1992.
- Reinarman, C.; Levine, HG. Crack in context: America's latest demon drug. In: Reinarman, C.; Levine, HG., editors. Crack in America: Demon drugs and social justice. Berkeley: California; 1997. p. 1-17.
- Rogers, EM. Diffusion of innovations. 4. New York: Free Press; 1995.
- Schafer, DP. Culture: Beacon of the future. Westport, CT: Praeger; 1998.
- Schulenberg, J.; Maggs, JL.; Hurrelmann, K. Health risks and developmental transitions during adolescence. Cambridge, UK: Cambridge; 1997. p. 161-189.
- Sellin, T. Culture, conflict, and crime. New York: Social Science Research Council; 1938.
- Sifaneck SJ, Kaplan CD, Dunlap E, Johnson BD. Blunts and blowtjes: Cannabis use practices in two cultural settings and their implications for secondary prevention. Free Inquiry in Creative Sociology. 2003; 31:1–11.
- Sifaneck SJ, Kaplan CD. Keeping off, stepping on and stepping off: The steppingstone theory reevaluated in the context of the Dutch cannabis experience. Contemporary Drug Problems. 1995; 22:483–512.
- Smith, JK.; Deemer, DK. The problem of criteria in the age of relativism. In: Denzin, NK.; Lincoln, YS., editors. Handbook of qualitative research. 2. Thousand Oaks, CA: Sage; 2000. p. 877-896.
- Spillman, L., editor. Cultural sociology. Malden, MA: Blackwell; 2002.
- Stryker, S. Social psychology. Piscataway, NJ: Transaction; 1990. Symbolic interactionism: Themes and variations; p. 3-29.
- Swidler A. Culture in action: Symbols and strategies. American Sociological Review. 1986; 51:273–286.
- Waldorf, D.; Reinarman, C.; Murphy, S. Cocaine changes: The experience of using and quitting. Philadelphia, PA: Temple; 1991.
- Williams, T. Crackhouse: Notes from the end of the line. Reading, MA: Addison-Wesley; 1992.
- Wilson, WJ. The truly disadvantaged: The inner city, the underclass, and public policy. Chicago: Chicago: 1987.
- Winick C. Maturing out of narcotic addiction. United Nations Bulletin on Narcotics. 1963; 14:1-7.
- Wolfgang, ME.; Ferracuti, F. The subculture of violence: Towards an integrated theory in criminology. Beverly Hills, CA: Sage; 1982.
- Yamaguchi K, Kandel DB. Patterns of drug use from adolescence to young adulthood: III. Predictors of progression. American Journal of Public Health. 1984; 74:673–681. [PubMed: 6742253]
- Zinberg, N. Drug, set, and setting. New Haven, CT: Yale; 1984.