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Highlights

From 1991 through 1997, African American adolescents had consistently lower substance use rates than white and Hispanic adolescents, but the use rates of older African Americans were similar to those of whites and Hispanics of comparable age.

Patterns of Substance Use Among Minority Youth and Adults in the United States: An Overview and Synthesis of National Survey Findings



NEDS Analytic Summary Series

The Center for Substance Abuse Treatment (CSAT) works to improve the lives of those affected by alcohol and other substance abuse, and, through treatment, to reduce the ill effects of substance abuse on individuals, families, communities, and society at large. Thus, one important CSAT mission is to expand the knowledge about effective substance abuse treatment and recovery services. In support of these efforts, CSAT established the National Evaluation Data Services (NEDS) contract to provide a wide array of secondary data analysis products to the substance abuse treatment field.

Specifically, the NEDS project is focused upon providing CSAT with an analytic capability to use existing data to address policy- and practice-relevant topics as well as future research and evaluation activities. NEDS has developed several product lines designed to provide analytic findings to substance abuse treatment policymakers, service providers, services researchers and evaluators in a format that is most useful to the end user.

The Analytic Summary is one of the NEDS product lines. The purpose of the Analytic Summary is to provide a brief summary of each technical report produced by NEDS written in non-technical language. Readers who find the Analytic Summary results of interest can contact the original NEDS technical report authors for more detailed information. Through this process, the NEDS Analytic Summaries provide information to the substance abuse treatment field and promote linkages among different areas in the field.

This Analytic Summary

This Analytic Summary is based on the NEDS Technical Report titled *Patterns of Substance Use Among Minority Youth and Adults in the United States: An Overview and Synthesis of National Survey Findings* (French, K., Finkbiner, R., & Duhamel, L., 2002). For a more thorough discussion of the analysis and findings, please obtain a copy of the complete Technical Report. Information for doing so is provided on the last page of this summary.

Contents

Analytic Importance	2
Analytic Approach	3
Findings	4
Implications	7
Future Steps	9



CSAT
Center for Substance
Abuse Treatment
SAMHSA

Patterns of Substance Use Among Minority Youth and Adults in the United States: An Overview and Synthesis of National Survey Findings

Analytic Importance

One important function of CSAT is to expand the knowledge about, and the availability of, effective treatment and recovery services for those affected by alcohol and other substance abuse. In sponsoring these analyses of the data it has collected, CSAT is attempting to gain useful insight into the fundamental question: *What constitutes effective (and cost-effective) treatment, and for what populations?*

Substance abuse is by no means limited to specific racial or ethnic populations. There is, however, increasing concern about substance abuse patterns among racial and ethnic minorities. These population subgroups tend to be over-represented in public treatment facilities, and these facilities require culturally appropriate services in order to best address their clients' unique treatment needs.

Observed patterns of substance use differ among various racial/ethnic groups, and awareness of those differences have in the past informed the design and implementation of culturally appropriate approaches to treatment. Ongoing efforts toward a richer understanding of these patterns are nevertheless needed. Additional information can serve policymakers and providers as the basis for improving substance abuse treatment services tailored to meet the treatment needs of diverse client populations.

Analytic Purpose

Rates of past and current substance use among population subgroups informs the need for substance abuse treatment and can help to better plan for culturally appropriate treatment services. This analysis sought to identify and

examine patterns of alcohol and drug use during the 1990s among three major racial/ethnic population subgroups in the United States: white (non-Hispanic), African American (non-Hispanic), and Hispanic. Other minority groups were not included in the analysis because sufficient data were not available.

The approach included descriptive comparisons of three national surveys that were conducted during the past decade:

- **Youth Risk Behavior Survey (YRBS)**, a biannual survey of high school students in the 50 states and the District of Columbia, designed to monitor the prevalence of youth behaviors that influence health and administered in the classroom by trained data collectors.
- **Monitoring the Future (MTF)**, an annual survey of junior high school and high school students throughout the U.S., designed to examine change in adolescent beliefs, attitudes, and behaviors for a broad range of societal issues.
- **National Household Survey on Drug Abuse (NHSDA)**, an annual nationwide survey of people 12 years of age and older, designed to measure the prevalence of drug use and to monitor drug use trends over time.

Additionally, data from the 1998 NHSDA survey provided the basis for descriptive comparisons at one point in time for all age groups.

The analysis addressed three key analytic questions:

- How comparable are the findings from the three national surveys?

This analysis compared the patterns of substance use among three racial/ethnic population subgroups as reported in three national surveys:

- Youth Risk Behavior Study (YRBS)
- Monitoring the Future (MTF)
- National Household Survey on Drug Abuse (NHSDA).



Patterns of Substance Use Among Minority Youth and Adults in the United States: An Overview and Synthesis of National Survey Findings (cont.)

The analysis addressed three key questions:

- How comparable are the findings from the three national surveys?
- What shifts in the patterns of adolescent past-month substance use occurred between 1991 and 1997 as indicated by the results of the three national surveys?
- How did the 1998 NHSDA rates of lifetime, past-year, and past-month use vary by race/ethnicity and age?



- What shifts in the patterns of adolescent past-month substance use occurred between 1991 and 1997 as indicated by the results of the three national surveys?
- How did the 1998 NHSDA rates of lifetime, past-year, and past-month use vary by race/ethnicity? What moderating effects did age have on these rates?

The findings were expected to provide policymakers, researchers, and others with information relevant to the assessment of treatment needs and effective delivery of treatment services.

Analytic Approach

Data Sources

The three national surveys selected as the basis for this analysis differ in several respects. YRBS is an epidemiological survey designed to monitor youth behaviors that influence health. MTF is designed to examine changes in adolescent beliefs, attitudes, and behaviors for a broad range of societal conditions. NHSDA is designed specifically to measure drug use among people of all ages.

Despite differences in purpose and design, the three surveys were selected for this analysis chiefly because they are comparable in terms of frequency, being administered either annually (NHSDA and MTF) or biannually (YRBS); and because they either focus exclusively on young people (YRBS and MTF) or contain a subsample of young people that is large enough to make them suitable for analysis by racial/ethnic group (NHSDA). (Sample sizes are not large enough, however, to disaggregate Asian American or Native American populations.)

Analytic Strategies

This analysis employed two analytic strategies. First, the analysis compared trends in young people's substance use across the three national surveys from 1991 through 1997. In order to maximize comparability among the three surveys, trend analyses covering the years 1991 through 1997 were performed for 12th-grade YRBS and MTF respondents; and for NHSDA respondents who were 17 to 18 years of age.

Second, the analysis examined overall rates of substance use among white, African American, and Hispanic adults as well as adolescents at one point in time (1998). This was accomplished by extracting data from the 1998 NHSDA, which sampled 25,500 persons age 12 and older.

Comparable items from each survey were selected using the following four categories of reported substance use:

- Alcohol
- Binge drinking (five or more drinks per hour)
- Marijuana
- Cocaine (powder and crack).

The use of heroin and other substances was reported at such low rates that comparisons were not meaningful.

To compare patterns of alcohol and drug use among the racial/ethnic groups under study, the analysis examined the following three categories of substance use prevalence:

- Lifetime use
- Past-year use
- Past-month (current) use.

Patterns of Substance Use Among Minority Youth and Adults in the United States: An Overview and Synthesis of National Survey Findings (cont.)

To compare substance use prevalence patterns by age for each racial/ethnic group, the analysis used the following age categories reported in NHSDA:

- 12 to 17 years old
- 18 to 25 years old
- 26 to 34 years old
- 35 years of age and older.

Data from the 1998 NHSDA survey were used because they were the most recently published NHSDA findings at the time of this analysis.

Findings

There were measurable differences among the three racial/ethnic groups, with whites having the highest use rates in younger years but with increasingly similar rates of African American and Hispanic Adults with white adults in the older age categories. Highlights of the analyses include the following:

- The rate of alcohol use, including binge drinking, was stable over the time period under study (1991 through 1997), but the rate of marijuana use for the three racial/ethnic groups increased.
- Rates for past-month, past-year, and lifetime use of alcohol were consistently higher among whites than among African Americans.

- Although Hispanics age 35 and older demonstrated the lowest lifetime rates of use for any illicit substance, including marijuana and cocaine, the rates of substance use among young Hispanics were consistently higher than those for either African American or white youths.

The following sections provide more detailed results relevant to the analytic questions addressed in this study: (1) the comparability of the three national surveys and their findings; (2) trends in substance use across time among whites, African Americans, and Hispanics; and (3) substance use rates across racial/ethnic and age groups at a specific point in time.

Comparisons of the Three National Surveys

Throughout most of the years examined in this analysis, the YRBS consistently showed the highest rates of substance use among survey respondents. The NHSDA almost always reflected the lowest rates. The MTF rates were typically equal to the YRBS rates or in between the YRBS and the NHSDA rates.

As illustrated in Exhibit 1, the patterns of reported use reflected by the surveys for all three racial/ethnic groups

From 1991 to 1997, the YRBS showed the highest rates of substance use, and NHSDA showed the lowest rates.

MTF rates were more similar to the YRBS than to NHSDA rates.



Racial/Ethnic Group	YRBS				MTF				NHSDA			
	1991	1993	1995	1997	1991	1993	1995	1997	1991	1993	1995	1997
White	62%	57%	59%	62%	62%	55%	57%	62%	49%	45%	44%	48%
African American	49%	46%	45%	39%	36%	30%	34%	39%	39%	30%	34%	38%
Hispanic	62%	53%	57%	56%	51%	53%	49%	56%	43%	38%	44%	34%

Patterns of Substance Use Among Minority Youth and Adults in the United States: An Overview and Synthesis of National Survey Findings (cont.)

In all three surveys, adolescent past-month use of both alcohol and marijuana was:

- Highest among whites
- Second highest among Hispanics
- Lowest among African Americans.

were consistent. Although the rates of past-month alcohol use by whites, African Americans, and Hispanics differed from year to year, all three surveys captured very similar trends.

The patterns of the three survey results for past-month use of marijuana were consistent with the patterns for past-month alcohol use for white and Hispanic adolescents but not for African American adolescents. Although the findings from YRBS regarding marijuana again reflected the highest use rates among its respondents, the MTF and NHSDA rates for African American respondents were similar in 1991, and the NHSDA rates for that group exceeded the MTF rates in 1993. By 1995 the pattern described earlier was established, (i.e., NHSDA rates consistently lowest, YRBS rates consistently highest, and MTF rates typically falling somewhere between the YRBS and the NHSDA rates).

Factors contributing to the question of comparability among the national surveys include differences in the purposes of the surveys, in their sampling designs, in their modes of administration, and in their methods of adjusting the samples to represent the population being surveyed.

Trends in Substance Use from 1991 through 1997

Rates of past-month alcohol use and binge drinking among white, African

American, and Hispanic adolescents were generally stable over the time period investigated. White and Hispanic adolescents had generally similar rates, while African American adolescents demonstrated consistently lower rates. Findings for specific substances are summarized in the following sections.

Alcohol use. Alcohol was the most frequently used substance among respondents in all three surveys.

- White youths reported the highest rates of past-month alcohol use, African American youths reported the lowest rates, and Hispanic youths were slightly below the rates reported by white youths.
- African American youths reported rates of binge drinking that were consistently about half the rates for whites and Hispanics, a difference that was consistent throughout the study period.

Marijuana use. Marijuana was the second most frequently used substance among respondents to all three surveys. As shown in Exhibit 2:

- Trends of use reported by the three surveys were similar among all three racial/ethnic groups.
- Past-month marijuana use increased strikingly from 1991 through 1997 for all three racial/ethnic groups.

Racial/Ethnic Group	YRBS				MTF				NHSDA			
	1991	1993	1995	1997	1991	1993	1995	1997	1991	1993	1995	1997
White	20%	22%	26%	28%	15%	15%	21%	24%	14%	14%	14%	19%
African American	17%	21%	30%	32%	7%	8%	17%	19%	8%	14%	13%	15%
Hispanic	18%	20%	31%	30%	14%	13%	18%	21%	9%	8%	13%	11%



Patterns of Substance Use Among Minority Youth and Adults in the United States: An Overview and Synthesis of National Survey Findings (cont.)

According to the 1998 NHSDA:

- One-third of adolescents and almost nine-tenths of adults age 35 or older had used alcohol within their lifetimes.
- Past-year and past-month use of marijuana decreased with age for all racial/ethnic groups.



- Increase in marijuana use was sharpest at mid-decade and continued to increase.

As data become available from more recent years, it will be important to determine if the increasingly widespread marijuana use among adolescents continues to grow.

Cocaine/crack use. Rates of cocaine powder use for all three racial/ethnic groups steadily increased throughout the study period. Overall, young people's use of cocaine powder and crack cocaine from 1992 through 1997 was low, ranging between 0 percent and 8 percent among all survey respondents.

Consistent with the literature, African American youth had lower rates of alcohol use than either white or Hispanic youth. Protective factors (such as family, peer, and/or community based) may have influenced African American youth substance use behaviors.

Prevalence of Substance Use by Age: Patterns in 1998

Substance use rates were examined across racial/ethnic groups for one point in time (1998), using data from the 1998 NHSDA. Patterns that emerged included the following:

- Rates for past-month, past-year, and lifetime use of alcohol were higher among whites compared to African Americans and Hispanics.
- Lifetime use of cocaine and/or crack was lowest among adolescent and young adult African Americans, but as age increased, the use rates among African Americans were equivalent to the rates observed for whites and Hispanics.

- Rates of lifetime substance use among adolescent Hispanics were consistently higher than those of whites and African Americans for any illicit drug. However, Hispanics age 35 or older demonstrated the lowest lifetime rates of use for any substance.

Additional findings on the use of specific substances by racial/ethnic groups in different age categories are provided for alcohol, marijuana, and cocaine.

Alcohol use. Overall, four-fifths of the total NHSDA sample had used alcohol within his or her lifetime (see Exhibit 3). Rates ranged from one in three among adolescents, to almost nine-tenths among adults age 26 to 34.

- One-third of adolescents, three-fourths of adults age 18 to 34, and two-thirds of adults age 35 and older had used alcohol during the past year.
- About one-fifth of adolescents and three-fifths of adults age 18 to 25 had consumed alcohol within the past month.
- Past-month, past-year, and lifetime alcohol use rates were significantly lower for African American and Hispanic survey respondents than for whites.

Alcohol use rates among African American adults age 18 and over were 10 percent to 20 percent lower than the rates for whites within the same age range. Alcohol use rates among Hispanic adults were consistently 8 percent to 15 percent lower than the rates for whites.

Marijuana use. Regarding young respondents, there were no statistically

Patterns of Substance Use Among Minority Youth and Adults in the United States: An Overview and Synthesis of National Survey Findings (cont.)

Implications for research:

- Expand the study of adolescent use patterns to out-of-school youth
- Strive to fill knowledge gaps in understanding substance use patterns among additional minority groups
- Identify social and cultural factors that influence decisions to use alcohol or drugs.



Exhibit 3 1998 NHSDA Prevalence Rates Alcohol by Age and Race/Ethnicity			
Group	Percent who reported use in:		
	Past month	Past year	Lifetime
Age 12 - 17 (Totals)	19	32	37
White (n=3,091)	21	35	40
Black (n=1,374)	13***	22***	27***
Hispanic (n=1,869)	19	29**	36*
Age 18 - 25 (Totals)	60	74	83
White (n=2,926)	65	79	88
Black (n=1,798)	50***	64***	74***
Hispanic (n=2,187)	51***	56***	74***
Age 24 - 36 (Totals)	61	74	88
White (n=1,890)	65	79	93
Black (n=1,053)	55***	66***	82***
Hispanic (n=1,432)	53***	66***	78
Age 35+ (Totals)	53	65	87
White (n=3,802)	56	68	89
Black (n=1,590)	38***	48***	79***
Hispanic (n=1,307)	48**	61**	76***
Totals	52	64	81

*p<.05 (when compared to whites); **p<.001 (when compared to whites); ***p<.0001 (when compared to whites)

significant differences among racial/ethnic groups in past-month, past-year, or lifetime use of marijuana.

- Among adults between the ages of 18 and 25, whites consistently reported more frequent marijuana use than African American or Hispanic adults in the same age range.
- Past-month and past-year marijuana use decreased with age for all groups.

Cocaine/crack use. African American adolescents reported lifetime use of cocaine powder and crack cocaine much less frequently than did white adolescents. African American adults between the ages of 18 and 25 reported past-month, past-year, and lifetime use of cocaine powder and crack

cocaine less frequently than did white and Hispanic respondents.

In general, the comparisons of substance use prevalence indicated several consistent patterns not only in regard to race/ethnicity but also in regard to the strong mediating influence of age on substance use.

Implications

Findings on the differences and similarities in substance use among whites, African Americans, and Hispanics have a number of implications for substance abuse treatment research, policy, and practice.

Implications for Research

The patterns of substance use were fairly consistent across three national surveys of school-aged youth of differ-

Patterns of Substance Use Among Minority Youth and Adults in the United States: An Overview and Synthesis of National Survey Findings (cont.)

ent racial/ethnic background. Specific implications for research include:

- **Pursue research aimed toward a better understanding of substance use patterns among out-of-school youth.** Studies are needed on the portions of the young population that are not included in the YRBS or MTF school-based surveys.
- **Strive to fill knowledge gaps in the understanding of substance use patterns among additional minority groups.** Analysis of substance use patterns among whites, African Americans, and Hispanics should be extended to include Hispanic subgroups (e.g., Cuban Americans, Mexican Americans, and Puerto Ricans), as well as Asian American and Native American populations.
- **Identify the key social and cultural factors that influence an individual's decision to use alcohol or drugs.** Additional research is needed to better understand sociocultural variables that exist among racial/ethnic subgroups and how they predict individual risk for substance use at transitional points along the use-abuse continuum.

It also may be assumed that the treatment field would benefit from continuing research into the propensity of different generational cohorts for using alcohol and other substances. Differential patterns may exist independently of race/ethnicity and may be more closely related to the social norms of the decade in which individuals reach adolescence or adulthood.

Implications for Policy

This analysis has implications for future policy consideration in demonstrating the need for information on

minority substance use and the limitations of currently available data. Specific implications for policy include:

- **Encourage research that can lead to improved identification and deeper understanding of racial/ethnic subgroup cultural issues.** Efforts should be made toward the further exploration of the differences that characterize not only the larger racial groups, such as whites and African Americans, but also such smaller groups as Asian Americans and Native Americans.
- **Promote the acquisition of Federal-level information on minority substance use.** Federal agencies are uniquely positioned to collect information about minority populations that could not otherwise be collected.

Federal agencies, by definition, have greater access to information about minority populations nationally than agencies on other governmental levels. Their increasing involvement in data acquisition is needed to ensure adequate sample sizes and subgroup representation.

Implications for Practice

This analysis indicates that substance use treatment practitioners would benefit from recognizing the cultural issues that influence substance use. Specific implications for practice include the need to expand efforts to tailor alcohol and drug abuse treatments to subgroup needs. As more information about specific racial/ethnic subgroups becomes available, substance abuse treatment designs and operations may be able to incorporate this information as a means of providing more culturally sensitive, specifically targeted treatment services.

Implications for policy:

- Encourage research to better identify racial/ethnic subgroup cultural issues
- Promote acquisition of Federal-level information on minority group substance use.

Implications for practice include the need to expand efforts to tailor alcohol and drug abuse treatment to subgroup needs.



Patterns of Substance Use Among Minority Youth and Adults in the United States: An Overview and Synthesis of National Survey Findings (cont.)

Future Steps

The problems associated with substance abuse are serious, complex, and interrelated. Educational deficiency, crime and juvenile delinquency, physical and mental health disorders, and unemployment are all commonly associated with the abuse of alcohol and illicit substances. In light of these complex problems, billions of dollars of public funding have been generated to reduce the impact of substance abuse on American society.

Significant investment has been made in addressing the sociocultural links between race/ethnicity and substance use especially as those links pertain to the larger racial/ethnic groups. Nevertheless, as demonstrated in this analysis, existing data sources contain insufficient numbers of individuals from racial/ethnic groups other than the broad categories of white, African American, and Hispanic, and yet it is widely

understood that subgroups within these broad categories as well as subgroups not represented by them (e.g., Asian Americans and Native Americans) have distinctive characteristics that may influence substance use behaviors.

Policymakers, practitioners, and others associated with the treatment field will be better able to design and implement effective, culturally appropriate treatment programs as more data become available that address the risk behaviors of all people and focus on the specific cultural influences on all minority population subgroups.

Reference

French, K., Finkbiner, R., & Duhamel, L. (2002). *Patterns of substance use among minority youth and adults in the United States: An overview and synthesis of national survey findings*. Fairfax, VA: Caliber Associates.

Overview of Three National Surveys

Youth Risk Behavior Survey (YRBS). The YRBS, which began in 1990, is a biannual survey that focuses on health risk behaviors that result in significant mortality, morbidity, disability, and social problems during youth and adulthood. The survey is administered in the classroom by trained data collectors. Students record responses on computer scanning answer sheets. Parental consent is obtained prior to survey administration. Sampling weights are applied to each student to adjust for non-response and for the varying probability of selection.

Monitoring the Future (MTF). The MTF, which began in 1975, is a series of large annual surveys to study changes in the beliefs, attitudes, and behaviors of young people in the United States. One purpose of the MTF is to develop an accurate picture of current drug use and trends among youth. This study is conducted by the University of Michigan's Institute for Social Research and is funded by the National Institutes on Drug Abuse. The MTF consists of nationally representative samples of students in public and private high schools and middle schools in the

coterminous United States. Beginning in 1991, the study was expanded to include samples of 8th and 10th grade students.

National Household Survey on Drug Abuse (NHSDA). The NHSDA, which began in 1971, is an annual survey designed to measure the prevalence and correlates of drug use in the United States and to monitor drug use trends over time. In 1992, the Office of Applied Studies within SAMHSA took the lead in conducting the NHSDA. The NHSDA sample consists of civilian, non-institutionalized individuals aged 12 and older living in the United States. Persons excluded from the survey include homeless people (who are not residents of shelters), active military personnel, and residents of institutional group quarters (e.g. jails and hospitals). In 1991, Alaska and Hawaii were included for the first time, as were civilians and family members living on military bases, and people in college dormitories, rooming houses, and homeless shelters. the study was expanded to include samples of 8th and 10th grade students.

For more information, please contact the National Evaluation Data Services analysis team at (703) 385-3200, or visit the NEDS Web site.

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